

ZENworks 2020 Command Line Utilities Reference

October 2019

Legal Notice

For information about legal notices, trademarks, disclaimers, warranties, export and other use restrictions, U.S. Government rights, patent policy, and FIPS compliance, see https://www.microfocus.com/about/legal/.

© Copyright 2008 - 2021 Micro Focus or one of its affiliates.

The only warranties for products and services of Micro Focus and its affiliates and licensors ("Micro Focus") are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. Micro Focus shall not be liable for technical or editorial errors or omissions contained herein. The information contained herein is subject to change without notice.

Contents

	About This Guide	5
1	ZENworks Command Line Utilities	7
	zman. zeninfocollect zac for Windows zac for Linux. zac for Macintosh	
2	ZENworks Diagnostic Center	199
	2.1 Collecting ZDC Baseline.2.2 Downloading and Extracting ZDC.2.3 Running ZDC.	200
3	Troubleshooting ZENworks Command Line Utilities	203
4	Guidelines for Working with Zman	209

About This Guide

This ZENworks Command Line Utilities Reference includes information to help you use Micro Focus ZENworks utilities such as zman, zac, and zeninfocollect.

The information in this guide is organized as follows:

- Chapter 1, "ZENworks Command Line Utilities," on page 7
- Chapter 2, "ZENworks Diagnostic Center," on page 199
- Chapter 3, "Troubleshooting ZENworks Command Line Utilities," on page 203
- Chapter 4, "Guidelines for Working with Zman," on page 209

Audience

This guide is intended for ZENworks administrators.

Feedback

We want to hear your comments and suggestions about this manual and the other documentation included with this product. Please use the User Comments feature at the bottom of each page of the online documentation.

Additional Documentation

ZENworks Configuration Management is supported by other documentation (in both PDF and HTML formats) that you can use to learn about and implement the product. For additional documentation, see the ZENworks documentation Web site.

ZENworks Command Line Utilities

The following sections give information on the Micro Focus ZENworks command line utilities:

- "zman(1)" on page 8
- "zeninfocollect(1)" on page 138
- "zac for Windows(1)" on page 140
- "zac for Linux(1)" on page 159
- "zac for Macintosh(1)" on page 188

zman(1)

Name

zman - The command line interface to manage Micro Focus ZENworks products, including Asset Management, Configuration Management, Endpoint Security Management, and Full Disk Encryption.

Description

The zman command line interface provides quick access to most ZENworks management operations. By utilizing zman commands in scripts, you can automate many ZENworks management tasks.

The following sections provide information about all of the commands provided for the ZENworks products. The commands apply to all products, with the following exceptions:

- **ZENworks Asset Management commands:** Apply only to ZENworks Asset Management.
- **ZENworks Bundle commands:** Apply only to ZENworks Configuration Management.
- ZENworks Imaging commands: Apply only to ZENworks Configuration Management.
- ZENworks Endpoint Security Management commands: Apply only to ZENworks Endpoint Security Management.
- ZENworks Full Disk Encryption commands: Apply only to ZENworks Full Disk Encryption.

Syntax

```
zman <category>-<command> [-options] [arguments]
```

In general, zman commands have both a short form and a long form. The long form is assembled in the form category-action. For example, the command registration-list lists all registrations in a registration folder. There are many commands, but most of them are easy to remember because they are grouped under categories (workstation, server, bundle, policy, administrator, registration, etc) and most actions (list, create, modify, delete) to perform on them are common.

The abbreviated form of each command uses one letter from each word in the long form. In this manner, admin-list is shortened to al. There are some exceptions to this rule to maintain the uniqueness of the short names. For example, bc is the short form of bundle-create, and bcp is the short form of bundle-copy.

A command takes options and arguments. Options can be specified anywhere in the command. Arguments are dependent on position.

Options

Options are of two types: switches and flagged options. Both have a short and long form. The short form is preceded by a single hyphen and the long form is preceded by two hypens. For example, -n and --namefilter are the short and long forms of a flagged option used to filter the display of results by name for the bundle-list command.

Switch: A parameter that does not take any value. Its presence alone conveys the meaning. For example, specifying the -recursive switch in bundle-list indicates that the contents of the subfolders should also be displayed.

Flagged Option: This parameter is used to set a value for an option. The value is given followed by a space or equals sign after the short or long flag of the option. Example: zman bundle-list - namefilter "bundle*" -r

Arguments

Arguments for a command are usually ordered in the same way as the command itself. For example, for server-add-bundle, the server is named first and the bundle second.

Guide to Usage

This section contains a guide to general command formatting and conventions.

Administrators

Every action in zman is governed by the access limitations of the administrator. The initial Administrator account created during the initial installation has rights to all objects. Additional administrator accounts you create are granted read-only rights by default. These accounts must be explicitly granted rights to any objects they are to manage.

Help

The zman command line interface provides help at several levels. Pipeline the help through the operating system's native more command for scrollable output.

• At the highest level, lists all the categories of commands available in zman and the global options for the commands.

```
Example: zman
```

• At the all category level, lists all the commands available in zman organized by categories (workstation, server, bundle, policy, etc.).

```
Example: zman -h
```

For each category, lists the commands available specific to that category.

```
Example: zman policy /?
```

 At each command level, gives usage, detailed help, and examples for a particular command.

```
Example: zman policy-list --help
```

• -h, and --help are the various help options available.

Folders

If no folder is specified for commands that take a folder argument, the command targets the root folder. To specify a folder path, list each folder from the root separated by a forward slash (/). For example, if you have a folder named folder1 in the root, containing a subfolder named subfolder1, you would reference this folder as folder1/subfolder1. Each specified folder must already exist.

Mandatory and Optional arguments

Arguments enclosed inside parentheses () are mandatory and those enclosed by square brackets [] are optional.

Ellipsis (...)

An ellipsis indicates that a command accepts multiple entries of the last argument type. The arguments must be separated by space or commas, depending on the command. For example:

```
zman server-add-bundle [options] (server) (bundle) [...]
```

The ellipsis indicates that server-add-bundle can accept multiple bundles. In the command level help, the multiple entry argument help is given as [(bundle) (bundle)... (bundle)] for more clarity.

All commands that have multiple entries of the last argument also have the -f \mid --folder option. This option is convenient if all the entries of the argument are under the same folder. The path of the entries are calculated relative to this folder path. For example:

zman server-add-bundle server1 bundlefolder/bundle1 bundlefolder/ bundle2

can also be given as:

zman server-add-bundle server bundle1 bundle2 --folder bundlefolder

Path of the ZENworks Objects

If the argument required is the path of a ZENworks object, the path must be specified relative to the root folder of that object separated by a forward slash (/), unless it is specified in the command help to enter the absolute path. For example:

zman server-add-bundle serverfolder/server bundlefolder/bundle1 where the absolute paths of the arguments are:

/devices/servers/serverfolder/server and /bundles/bundlefolder/bundle1

Exporting Objects to a File

You can use the zman commands such as bundle-export-to-file, policy-export-to-file, and settings-export-to-file to export bundles, policies, and settings definitions respectively to a specified file in the XML format. The file is created with the specified name and file extension. If the file extension is not specified, the .xml extension is added by default. You can use these files to create bundles, policies, and settings.

zman Service

You can now run zman as a service. Running zman as a service enables you to execute zman commands in service mode, which reduces the execution time for the commands.

The zman service commands are grouped within the shell category and are as follows:

- ◆ "zman shell-start-as-service (ssas) [options]" on page 10
- "zman shell-stop-service (sss)" on page 11
- "zman shell-status (ssts)" on page 11

zman shell-start-as-service (ssas)[options]

Starts the zman service.

Accepts the following options:

-s or --servicePort: Specify the port for the zman server to run. The default port is 2020

```
zman shell-stop-service (sss)
```

Stops the zman service.

```
zman shell-status (ssts)
```

Displays the zman service status.

To run zman commands as a service, you must do the following:

- Before starting the zman service, run the zman admin-store-credential(asc) command to save the credentials. The zman service uses the saved credentials to run the zman commands in service mode.
- If you choose to run any zman command that requires file paths in service mode, you must specify the complete file path instead of the relative file path. By default, the working directory is initialized to the location where the zman service is started.
- If you are running zman as a service, ensure that the service is restarted after completing system update on the server.

The following zman commands run as separate processes even when the zman service is up and running:

```
zman shell-stop-service(sss)
zman admin-create(ac)
zman admin-store-credential(asc)
zman certificate-authority-export(cae)
zman certificate-authority-import(cai)
zman zenserver-backup(zsb)
zman zenserver-restore(zsr)
```

List of Commands

- "Asset Management Commands" on page 13
- "Audit Settings Commands" on page 13
- "Administrator Commands" on page 14
- "Assignments Commands" on page 17
- "Batch Command" on page 17
- "Bundle Commands" on page 18
- "Bundle Settings Commands" on page 33
- "Certificate Authority Commands" on page 35
- "Credential Commands" on page 35
- "Contents Commands" on page 36
- "Database Commands" on page 38
- "Deployment Commands" on page 38
- "Discovery Commands" on page 40

- "Dynamic Group Commands" on page 41
- "Endpoint Security Management Commands" on page 42
- "Full Disk Encryption Commands" on page 44
- "Hotlist Command" on page 46
- "Intel AMT Commands" on page 46
- "Imaging Command" on page 48
- "Inventory Commands" on page 48
- "License Commands" on page 50
- "Location Commands" on page 50
- "Message Commands" on page 54
- "Network Environment Commands" on page 56
- "Micro Focus Customer Center Registration Command" on page 58
- "Mobile Device Commands" on page 59
- "Object Commands" on page 64
- "Primary Server Commands" on page 64
- "Policy Commands" on page 65
- "Policy Settings Commands" on page 72
- "Query Commands" on page 74
- "Queue Commands" on page 74
- "Registration Commands" on page 75
- "Role Commands" on page 78
- "Ruleset Commands" on page 81
- "Satellite Server Commands" on page 86
- "Server Commands" on page 92
- "Settings Commands" on page 105
- "Subscription Commands" on page 107
- "System Update/Product Recognition Update Commands" on page 110
- "User Commands" on page 114
- "Workstation Commands" on page 122
- "ZENworks Server Commands" on page 130
- "Global Options" on page 131
- "Security" on page 132
- "Files" on page 133
- "Exit Codes" on page 133
- "ZeUS Commands" on page 136

Asset Management Commands

These commands are used to load purchase record files and refresh the compliance engine. They apply only to ZENworks Asset Management.

- * "asset-management-import-contract|amic (-f|--fileName=Filepath)" on page 13
- "asset-management-load-purchase-record (amlpr)" on page 13
- "asset-management-refresh-compliance-data (amrcd)" on page 13

asset-management-import-contract|amic (-f|--fileName=Filepath)

Imports a contract to a file. The command queues the import task to be processed by the loader. The loader then loads the contracts from the file.

The command is asynchronous, which means that zman returns immediately and does not wait for the import to be complete. This is because the command might run for a long time. You can check the progress of the import by viewing the log file created by the command.

Accepts the following option:

-f, --filename=[File path]: Specify the full path of the comma-separated (.csv or .txt) file to be imported.

asset-management-load-purchase-record (amlpr)

Loads a purchase record file. The Purchase Record Loader looks for the purchase record file to load on the primary server in the folder ZENWORKS_HOME/temp/PurchaseRecordImport/uploaded. If you have not yet used the Purchase Record Loader from ZENworks Control Center, you need to create this folder.

This command is asynchronous, which means zman returns immediately and does not wait for the command to complete. This is because the command may run for a long time. You can check the status of this process from ZENworks Control Center.

asset-management-refresh-compliance-data (amrcd)

Runs the software compliance engine to refresh the software license compliance data.

This command is asynchronous, which means zman returns immediately and does not wait for the command to complete. This is because the command may run for a long time. You can check the status of this process from ZENworks Control Center.

Audit Settings Commands

These commands are used to import and export audit configuration details. Audit commands begin with audit—in the long form, or with the letter a in the short form. The following commands accept the option flags listed in the Global Options section. In addition, they accept individual options as listed with each command.

- * "audit-settings-import-from-file (asiff)[options] (XML file path)
 [destination device or device folder path][...]" on page 14

audit-settings-export-to-file asetf [-s|--source=source device or device folder path] [-a|--auditEventStatus=Event status] [-t|--type=Type] [-e|--effective] (XML file path) [<settings name> <settings name>... <settings name>]

Exports change and agent audit event settings to an XML file for a zone, device folder or device level.

- -s, --source=<source device or device folder path>: Path of the device or device folder relative to /Devices from which settings have to be exported. If not specified, settings will be exported from the Management Zone level.
- -a, --auditEventStatus=<Event status>: Event status enabled, disabled or all. Default is all.
- -t, --type=<Type>: The event type can be AgentEvents, ChangeEvents or all. The default value is all.
- -e, --effective: If specified, the effective settings will be retrieved, else only the settings defined or overridden at the source path will be retrieved.

(XML file path): The file into which the settings data will be stored in XML format. If the file does not exist a new file is created.

[settings name][...]: Names of the settings to be exported. If not specified, all settings will be exported. If specified, the effective settings will be retrieved, else, only the settings defined or overridden at the source path will be retrieved.

audit-settings-import-from-file (asiff)[options] (XML file path) [destination device or device folder path][...]

Imports change and agent audit event settings from an XML file, for a zone, device folder or device level.

(XML file path): XML file containing exported settings information. Use audit-settings-export-to-file (asetf) to export settings information into an XML file.

[destination device or device folder path][...]: Path of the device or device folder relative to /Devices on which settings have to be set. If not specified, settings will be set at the Management Zone level.

Administrator Commands

These commands are used to create and manage administrator accounts. Administrator commands begin with admin- in the long form or the letter a in the short form.

All of the commands below accept the option flags listed in the Global Options section. In addition, they accept individual options as listed with each command.

- ◆ "admin-clear-credential (acc)" on page 15
- "admin-create (ac) <administrator or user> [options]" on page 15
- "admin-delete (ad) <ZENworks administrator name> [...]" on page 15
- "admin-list (al) [options]" on page 15
- * "admin-list-roles (alr) <ZENworks administrator name> [options]" on page 15

- "admin-rename (ar) <ZENworks administrator name> (new name)" on page 16
- "admin-rights-delete (ard) <ZENworks administrator name> [options]
 [object path]" on page 16
- "admin-rights-info (ari) <ZENworks administrator name> [object path]
 [options]" on page 16
- * "admin-rights-set (ars) <ZENworks administrator name> [rights category] [object path] [...] [options]" on page 16
- "admin-store-credential (asc) <ZENworks administrator name>" on page 17

admin-clear-credential (acc)

Clears the ZENworks username and password stored by using the admin-store-credential command. It is always safer and is a good practice to delete the stored credentials after you are finished executing the commands.

admin-create (ac) <administrator or user> [options]

Creates a ZENworks administrator account.

(administrator or user) - Name of the administrator or full path of a user in a user source.

Accepts the following options:

- -f, --fullname=[full name] Full name of the ZENworks administrator.
- -a, --assign-same-rights Gives the new administrator the same rights as the administrator who executes this command.

The command prompts for the password of the administrator, to avoid entering the password in clear text. If the administrator account is based on a user, it uses the same credentials defined in the user source so the command does not prompt for the password.

admin-delete (ad) <ZENworks administrator name> [...]

Deletes a ZENworks administrator account.

(ZENworks administrator name) [...] - Name of the ZENworks administrator. The wildcard * can be used in the object names if it is enclosed in quotation marks. Exercise caution while using wildcards for deleting objects.

admin-list (al) [options]

Lists all ZENworks administrator accounts.

Accepts the following options:

- -n, --namefilter=[filter string] Displays results matching the specified name. The wildcards * and ? can be used if they are enclosed in quotation marks.
- -s, --scrollsize=[scrollsize] Number of results to be displayed at a time.

admin-list-roles (alr) <ZENworks administrator name> [options]

Lists roles assigned to a ZENworks administrator account.

Accepts the following option:

-l, --longnames - Displays names for the rights. By default, the abbreviated form of the rights name is displayed.

admin-rename (ar) <ZENworks administrator name> (new name)

Renames a ZENworks administrator account.

admin-rights-delete (ard) <ZENworks administrator name> [options] [object path]

Deletes rights assigned to a ZENworks administrator account.

[object path] [...] - Full path of the ZENworks object, starting with a forward slash (/).

Accepts the following option:

-c, --category=[rights category] - Name of the category within which the rights are grouped. To see the list of categories, run zman admin-rights-set --help | more.

admin-rights-info (ari) <ZENworks administrator name> [object path] [options]

Displays rights assigned to a ZENworks administrator account.

[object path] [...] - Full path of the ZENworks object, starting with a forward slash (/).

Accepts the following options:

- -c, --category=[rights category] Name of the category within which the rights are grouped. To see the list of categories, run zman admin-rights-set --help | more.
- -e, --effective Displays the effective rights of the administrator. Effective rights include rights inherited from roles assigned to the administrator. If this option is not specified, rights assigned directly to the administrator are displayed.
- -l, --longnames Displays names for the rights. By default, the abbreviated form of the rights name is displayed.

NOTE: This command lists the rights assigned to the administrator account. However, to list the rights for an administrator group account, the object path should not be included in the command.

admin-rights-set (ars) <ZENworks administrator name> [rights category] [object path] [...] [options]

Allows or denies rights for a ZENworks administrator account.

[rights category] - Name of the category under which the rights are grouped. To see the list of categories, run zman admin-rights-set --help | more.

[object path] [...] - Full path of the ZENworks object, starting with forward slash (/), on which the rights should be enforced. To view the root folders of the allowed object types for which rights can be assigned within each rights category, run zman admin-rights-modify -- help | more.

Accepts the following options:

- -a, --allow=[right][...] A comma-separated list of long or short names of the rights to be allowed. To view the rights for each category, run zman admin-rights-set --help | more.
- -A, --allow-all Allows all rights of the Rights category.
- -d, --deny=[right][...] A comma-separated list of long or short names of the rights to be denied.

 To view the rights of each category, run zman admin-rights-set --help | more.
- -D, --deny-all Denies all rights of the Rights category.

- -f, --folder=[folder name] Full path of a folder. If specified, the path of the objects is determined relative to this folder. This can be used to specify multiple objects under the same folder.
- -H, --help Displays detailed help about the categories of rights available, and the long and short form of rights names within each category. If a category name is specified, help is provided for that category.

```
admin-store-credential (asc) <ZENworks administrator name>
```

Stores the ZENworks username and password for use with every command so credentials need not be entered for every command. The credentials are stored on the home directory of the logged-in user and are used only for that logged-in user. In Linux, ensure that the user has a home directory. If you share the same machine login with other ZENworks administrators, you must clear your credentials by using the admin-clear-credential command after you are finished executing commands.

Assignments Commands

These commands are used to compute assignments for all devices in the zone. Assignment commands begin with assignments—in the long form, or with the letter a in the short form.

All of the commands below accept the option flags listed in the Global Options section.

- "assignments-compute-effective-assignments (area)" on page 17
- "assignments-bundle-status-recompute (absr)" on page 17

```
assignments-compute-effective-assignments (area)
```

Performs effective assignment computation for all managed devices in the zone.

```
assignments-bundle-status-recompute (absr)
```

Computes the bundle assignments status for all managed devices in the zone.

Batch Command

The batch command is a utility command used to execute a list of zman commands from a text file. The commands are executed faster because logging into ZENworks is done only once and not for every command. Batch commands begin with batch—in the long form, or with the letter b in the short form.

This command accepts the option flags listed in the Global Options section. In addition, it accepts individual options as listed with the command.

```
• "batch-execute (bex) (file path) [...] [options]" on page 17
```

```
batch-execute (bex) (file path) [...] [options]
```

Executes zman commands from text files in a batch (not to be confused with Windows batch files).

(file path) [...] - The path of the text files containing zman commands to be executed. Lines starting with #, rem, REM, ; and // are considered as comments, and are not processed. For a sample file, refer to BatchExecuteCommands.txt located in:

On Windows: %ZENWORKS HOME%\Novell\Zenworks\share\zman\samples\batch

On Linux: /opt/novell/zenworks/share/zman/samples/batch

Accepts the following option:

-e, --exit-on-failure - Stops executing the commands and exits if a command fails partially or totally. A command is said to partially fail for commands that take multiple arguments when the processing of one or more of the arguments was not successful. For example, for bundle-delete, the command is said to partially fail if one of the arguments could not be found or deleted. By default, the commands in the file are executed continuously without checking for failure.

Examples:

• To execute zman commands in multiple files:

```
zman bex c:\filetxt c:\filetxt
The files are executed in the order of input.
```

To execute zman commands in multiple files but exit when a command fails:
 zman bex /home/user1/file1 /home/user1/file2 -e
 The files are executed in the order of input.

Bundle Commands

These commands are used to create, modify and manage bundles. Bundle commands begin with bundle- in the long form, or with the letter b in the short form.

All of the commands below accept the option flags listed in the Global Options section. In addition, they accept individual options as listed with each command. These commands apply only to ZENworks Configuration Management.

- "bundle-add-actions (baa) (bundle path) (action XML file) [...] [options]" on page 20
- "bundle-assign (ba) (device or user type) (bundle or bundle group) (device or user object path) [...] [options]" on page 20
- "bundle-copy (bcp) (bundle path) (bundle name) [parent folder] [options]" on page 22
- "bundle-create (bc) (bundle name) (bundle XML file) [parent folder] [options]" on page 22
- "bundle-delete (bd) (bundle object path) [...][options]" on page 23
- "bundle-delete-version (bdv) (bundle path) [bundle version number] [options]" on page 23
- "bundle-disable (bdl) (bundle path) [...] [options]" on page 23
- "bundle-enable (bel) (bundle path) [...] [options]" on page 24
- "bundle-export-actions (bea) (bundle path) (XML file path) (action set type) [action's positions] [...]" on page 24
- * "bundle-export-to-file (betf) (bundle path) (XML file path) [version of the bundle][-c|--export-content]" on page 24
- "bundle-folder-create (bfc) (folder name) [parent folder] [options]" on page 24

- "bundle-group-add (bga) (bundle group path) (bundle path) [...] [options]" on page 25
- "bundle-group-create (bgc) (group name) [parent folder] [options]" on page 25
- "bundle-group-members (bgm) (bundle group path) [options]" on page 25
- "bundle-group-remove (bgr) (bundle group path) (bundle path) [...] [options]" on page 25
- "bundle-increment-version (biv) (bundle path) [...] [options]" on page 25
- "bundle-list (bl) [options] [folder]" on page 25
- "bundle-list-actions (bla) (bundle path) [action set type]" on page 26
- "bundle-list-assignments (blas) (bundle or bundle group) [options]" on page 26
- "bundle-list-groups (blg) (bundle path) [options]" on page 26
- "bundle-list-version (blv) (bundle path)" on page 26
- "bundle-move (bmv) (bundle object path) [destination folder path]" on page 26
- "bundle-remove-actions (bra) (bundle path) (action set type) [action's positions] [...]" on page 27
- "bundle-rename (br) (bundle object path) (new name) [options]" on page 27
- "bundle-relocate-actions (brla) (bundle path) (action set type) (Target action set type) [<action's positions>, <action's positions>,...,<action's positions>]" on page 27
- "bundle-reorder-actions (broa) (bundle path) (action set type) (current position) (new position)" on page 27
- "bundle-sandbox-create (bsc) (bundle path) [version of the bundle] [options]" on page 28
- "bundle-sandbox-publish (bsp) (bundle path) [options]" on page 28
- "bundle-sandbox-publish-to-newbundle (bsptn) (original bundle path) (new bundle name) [parent folder] [options]" on page 29
- "bundle-sandbox-revert (bsr) (bundle path)" on page 29
- "bundle-unassign (bua) (device or user type) (bundle or bundle group) (device or user object path) [...] [options]" on page 30
- "bundle-update-assignment (bupa) (device or user type) (bundle or bundle group) (device or user object path) [...] [options]" on page 30
- "bundle-view-advanced-deployment-status (bvads) (bundle path) [options]" on page 31
- "bundle-view-assignment-schedule (bvas) (device or user type) (bundle or bundle group) (device or user object path)" on page 32

- "bundle-view-summary-totals (bvst) (bundle path) [options]" on page 32
- "linux-export-actions (lea) (Action Type) (Action XML File path)
 (Content Files location Path) [options]" on page 33
- "bundle-appdata-calculation (bac) (bundle path or bundle GUID)
 [...]" on page 33

bundle-add-actions (baa) (bundle path) (action XML file) [...] [options]

Adds actions to a bundle.

(action XML file) [...] - The XML files that contain information for actions to be added. The actions are grouped under one of these action sets: Distribution, Install, Launch, Verify, Uninstall, Terminate. The XML file contains an ActionSet element that contains information of actions to be added for an action set. Multiple XML files can be given as input to add actions to different action sets of the bundle. The XML files can be created by exporting actions of an existing bundle using the bundle-export-actions command.

Accepts the following option:

-a, --actioninfo=[content and dependency for actions] - XML file containing content and bundle dependency information for actions that have file content or dependency on another bundle. For example, for Install MSI Action, the MSI file to be installed is the file content. Install Bundle Action takes another bundle as dependency so this data also needs to be specified for proper functioning of these actions. For the XML format template, refer to ActionInfo.xml located in:

On Windows: %ZENWORKS_HOME%\Novell\Zenworks\share\zman\samples\bundles **On Linux:**/opt/novell/zenworks/share/zman/samples/bundles

NOTE: If you choose the action set type as Uninstall, the following options are not supported for Linux bundles and Linux Patch bundles: DaysBeforeUninstallWhenNotUsed, DisplayUninstallMessage, IgnoreUninstallAfterUnassociation, IgnoreChainedDependencies, and AllowToCancelUninstall.

bundle-assign (ba) (device or user type) (bundle or bundle group) (device or user object path) [...] [options]

Assigns a bundle or bundle group to one or more device or user objects.

(device or user type) - Valid values are device, server, workstation, and user.

(device or user object path) [...] - The path of the device or user objects relative to the root folder of the device or user type specified.

Accepts the following options:

- -f, --folder=[bundle folder] The path of a bundle folder relative to /Bundles. If this option is specified, the path of the bundle objects is determined relative to this folder. This can be used to specify multiple bundle objects under the same folder.
- -I, --icon-location=[application location XML file] XML file that contains the locations to place the icon for the bundle application. For the XML file format, refer to IconLocation.xml located in:

On Windows:%ZENWORKS_HOME%\Novell\Zenworks\share\zman\samples\bundles
On Linux:/opt/novell/zenworks/share/zman/samples/bundles

- -d, --distribution-schedule=[distribution schedule XML file] XML file that contains the distribution schedule.
- -I, --launch-schedule=[launch schedule XML file] XML file that contains the launch schedule.
- -a, --availability-schedule=[availability schedule XML file] XML file that contains the availability schedule. For the schedule XML file templates, refer to the XML files located in:
- On Windows: %ZENWORKS_HOME%\Novell\Zenworks\share\zman\samples\
 schedules %ZENSERVER_HOME%\Micro Focus\Zenworks\share\zman\samples\
 schedules

On Linux:/opt/novell/zenworks/share/zman/samples/schedules

- -i, --install-immediately Installs the bundle immediately after distribution. To use this option, you must also specify the Distribution schedule. The Distribution schedule can be specified by using the --distribution-schedule, --distribute-now, or --distribute-on-device-refresh option.
- -L, --launch-immediately Launches the bundle immediately after installation. To use this option, you must also specify the Distribution schedule. The Distribution schedule can be specified by using the --distribution-schedule, --distribute-now, or --distribute-on-device-refresh option.
- -n, --distribute-now Sets the distribution schedule to distribute the bundle immediately. If this option is specified, the --distribution-schedule and --distribute-on-device-refresh options are ignored. The --distribute-now, --distribute-on-device-refresh, and --distribution-schedule options are mutually exclusive and are used to set the distribution schedule. The --distribute-now option is considered first, followed by --distribute-on-device-refresh and --distribution-schedule.
- -r, --distribute-on-device-refresh Sets the distribution schedule to distribute the bundle on device refresh. If this option is specified, the --distribution-schedule option is ignored.
- -s, --launch-on-device-refresh Sets the launch schedule to launch the bundle on device refresh. If this option is specified, the --launch-schedule option is ignored.
- -w, --wakeup-device-on-distribution Wakes up the device by using Wake-On-LAN if it is shut down while distributing the bundle. To use this option, you must also specify the Distribution schedule. The Distribution schedule can be specified by using the --distribution-schedule, -- distribute-now, or --distribute-on-device-refresh option.
- -B, --broadcast=[Broadcast address][...] A comma-separated list of addresses used to broadcast the Wake-On-LAN magic packets. This option is used only if you choose to wake up the device by using Wake-On-LAN. A valid IP address is a valid value.
- -S, --server=[Path of the Primary or Proxy Server objects relative to /Devices][...] A comma-separated list of Primary or Proxy Server objects used to wake up the device. This option is used only if you choose to wake up the device by using Wake-On-LAN.
- -C, --retries=[Number of retries] Number of times the Wake-On-LAN magic packets are sent to the device(s). This option is used only if you choose to wake up the device by using Wake-On-LAN. The value must be between 0 and 5. The default value is 1.
- -T, --timeout=[Time interval between retries] The time interval between two retries. This option is used only if you choose to wake up the device by using Wake-On-LAN. The value must be between 2 and 10 (in minutes). The default value is 2.
- -N, --app-installation-now-schedule Sets the app installation schedule to install the bundle immediately. If this option is specified, the -app-installation-schedule option is ignored.
- -M –app-installation-schedule=<app installation schedule XML file> A XML file includes the installation schedule. For more information on the schedule template, see:

On Windows: %ZENWORKS_HOME%\Novell\ZENworks\share\zman\samples\schedules **On Linux**: /opt/novell/zenworks/share/zman/samples/schedule

-c, --conflicts=[bundle conflict resolution order] - Determines how bundle conflicts are resolved.

Valid values are userprecedence or 1, deviceprecedence or 2. For userprecedence, user-associated bundles are applied first, followed by device-associated bundles. For deviceprecedence, device-associated bundles are applied first, followed by user-associated bundles. If this option is not specified, userprecedence is taken as the default value.

bundle-copy (bcp) (bundle path) (bundle name) [parent folder] [options] Copies a bundle.

Accepts the following options:

- -d, --desc=[description] Description for the bundle.
- -i, --icon-file=[bundle icon file] The path of the image file containing the image that should be used as the bundle icon. If this option is not specified, the contents of the subfolders are not listed.

bundle-create (bc) (bundle name) (bundle XML file) [parent folder] [options]

Creates a new bundle.

(bundle XML file) - XML file containing exported bundle information. Use bundle-export-to-file (betf) to export an existing bundle's information into an XML file. If you want to reuse files, template XML files can be created from bundles that were created through ZENworks Control Center. For a sample XML file, refer to WindowsMSIBundle.xml located in / opt/novell/zenworks/share/zman/samples/bundles on a Linux server or Installation_directory:\Novell\Zenworks\share\zman\samples\bundles on a Windows server.

Accepts the following options:

- -d, --desc=[description] Description for the bundle.
- -a, --actioninfo=[content and dependency for actions] XML file containing content and bundle dependency information for actions that have file content or dependency on another bundle. For example, for Install MSI Action, the MSI file to be installed is the file content. Install Bundle Action takes another bundle as a dependency. This data also needs to be specified for proper functioning of these actions. For the XML format template, refer to ActionInfo.xml located in /opt/novell/zenworks/share/zman/samples/bundles on a Linux server or

 $In stall at ion_directory: \verb|\Novell\Zenworks\share\x| zman\samples \verb|\bundles on a Windows server.|$

- -i, --icon-file=[bundle icon file] The path of the image file containing the image that should be used as the bundle icon.
- -s, --create-as-sandbox=[create as sandbox] Creates the bundle as a sandbox.
- -x, --actions-as-in-xml Creates default actions for the new bundle as found in the template XML file. For example if you delete Verify Install default action (for the Verify action type) from the bundle and export the bundle information into an XML file, all default actions found in the XML file excluding the Verify Install default action will be created for the new bundle. If you do not specify this option, a bundle will be created with all the default actions including the Verify Install default action which is not found in the XML file.

-n, --create-with-new-guid - Creates the policy object with the new GUID. If the option is not specified, it will validate the policy objects for imported GUID in the policy XML file. If the imported GUID does not exists, a new GUID will be created, else the imported GUID will be retained.

NOTE: If you choose the action set type as Uninstall, the following options are not supported for Linux bundles and Linux Patch bundles: DaysBeforeUninstallWhenNotUsed, DisplayUninstallMessage, IgnoreUninstallAfterUnassociation, IgnoreChainedDependencies, and AllowToCancelUninstall.

bundle-delete (bd) (bundle object path) [...][options]

Deletes one or more bundle objects.

(bundle object path) [...] - The path of the bundle objects (bundle, bundle folder or bundle group) relative to /Bundles. The wildcard * can be used in the object names if it is enclosed in quotation marks. Exercise caution while using wildcards for deleting objects.

Accepts the following options:

- -r, --recursive Deletes objects inside a folder recursively.
- -f, --folder=[bundle folder] The path of a bundle folder relative to /Bundles. If this option is specified, the path of the bundle objects is determined relative to this folder. This can be used to specify multiple bundle objects under the same folder.

bundle-delete-version (bdv) (bundle path) [bundle version number] [options]

Deletes one or more versions of the bundle.

[bundle version number] [...] - Version of the bundle to delete.

Accepts the following option:

- -a --all Deletes all the older versions of the bundle.
- -p, --previous Deletes all the versions of the bundle older than the specified version.

Examples:

To delete the version 5 of the bundle, zenbundle:

```
zman bdv zenbundle 5
```

To delete all the versions of the bundle, zenbundle:

```
zman bdv zenbundle-a
```

To delete all the versions of the bundle, zenbundle, that are older than the version 3:

```
zman bdv zenbundle version -p 3
```

bundle-disable (bdl) (bundle path) [...] [options]

Disables bundles.

Accepts the following option:

-f, --folder=[bundle folder] - The path of a bundle folder relative to /Bundles. If this option is specified, the path of the bundle objects is determined relative to this folder. This can be used to specify multiple bundle objects under the same folder.

bundle-enable (bel) (bundle path) [...] [options]

Enables bundles.

Accepts the following option:

-f, --folder=[bundle folder] - The path of a bundle folder relative to /Bundles. If this option is specified, the path of the bundle objects is determined relative to this folder. This can be used to specify multiple bundle objects under the same folder.

bundle-export-actions (bea) (bundle path) (XML file path) (action set type) [action's positions] [...]

Exports the actions added to a bundle's action set to a file. The file can be used as input to the bundle-add-actions command.

(action set type) - The type of the action set. If this option is specified, the actions for only this action set are listed. Valid values are Install, Launch, Verify, Uninstall, Terminate, and Preboot.

NOTE: The Terminate action set is not supported for Linux bundles and Linux Patch bundles.

[action's positions] [...] - A comma-separated list of position of actions in the action set. The first action is at position 1. Use the bundle-list-actions command to see the position of a particular action in an action set. This is optional, but if it is not specified, all the actions in the specified action set are exported.

bundle-export-to-file (betf) (bundle path) (XML file path) [version of the bundle][-c|--export-content]

Exports a bundle's information (in XML format) to a file. The XML file is to be used as input for creating bundles.

(XML file path) - The complete path of the XML file to which the bundle's information is to be exported.

[version of the bundle] - Version of the bundle to be exported. If this option is not specified, the published version of the bundle is considered. To export a sandbox version of the bundle, specify sandbox.

[-c|--export-content] - Exports the content of the bundle to a sub directory within the directory containing the XML file to which the bundle's information is exported. If the option is not specified, the bundle content is not exported.

Examples:

To export the sandbox version of a bundle named zenbundle to an xml file named bundle.xml:

zman betf bundlefolder/zenbundle C:\bundles\bundle.xml sandbox

To export the version 3 of a bundle named zenbundle to an xml file named bundle.xml:

zman betf bundlefolder/zenbundle C:\bundles\bundle.xml 3

To export the version 5 of a bundle named zenbundle to an xml file named bundle.xml and export the bundle's content to the C:\bundles\bundle_content directory:

zman betf bundlefolder/zenbundle C:\bundles\bundle.xml 5 -c

bundle-folder-create (bfc) (folder name) [parent folder] [options]

Creates a new folder for containing bundles.

Accepts the following option:

--desc=[description] - Description for the folder.

bundle-group-add (bga) (bundle group path) (bundle path) [...] [options]

Adds bundles to a bundle group.

Accepts the following option:

-f, --folder=[bundle folder] - The path of a bundle folder relative to /Bundles. If this option is specified, the path of the bundle objects is determined relative to this folder. This can be used to specify multiple bundle objects under the same folder.

bundle-group-create (bgc) (group name) [parent folder] [options]

Creates a bundle group and adds members to it.

Accepts the following options:

- --desc=[description] Description for the group.
- -m, --members=[bundle path][...] The path of the bundles relative to /Bundles.
- -f, --folder=[bundle folder] The path of a bundle folder relative to /Bundles. If this option is specified, the path of the bundle objects is determined relative to this folder. This can be used to specify multiple bundle objects under the same folder.

bundle-group-members (bgm) (bundle group path) [options]

Lists members of a bundle group.

Accepts the following option:

-s, --scrollsize=[scrollsize] - Number of results to be displayed at a time.

bundle-group-remove (bgr) (bundle group path) (bundle path) [...] [options]

Removes bundles from a bundle group.

Accepts the following option:

-f, --folder=[bundle folder] - The path of a bundle folder relative to /Bundles. If this option is specified, the path of the bundle objects is determined relative to this folder. This can be used to specify multiple bundle objects under the same folder.

bundle-increment-version (biv) (bundle path) [...] [options]

Increments the version of bundles. This command is applicable for versions prior to ZENworks 11 SP 1. In ZENworks 11 SP 1or higher, this command is replaced by the bundle-sandbox-publish (bsp) command

Accepts the following option:

-f, --folder=[bundle folder] - The path of a bundle folder relative to /Bundles. If this option is specified, the path of the bundle objects is determined relative to this folder. This can be used to specify multiple bundle objects under the same folder.

bundle-list (bl) [options] [folder]

Lists bundles objects.

Accepts the following options:

- -r, --recursive Lists results recursively including subfolders. If this option is not specified, the contents of the subfolders are not listed.
- -n, --namefilter=[filter string] Displays results matching the specified name. The wildcards * and ? can be used if they are enclosed in quotation marks.
- -c, --count Displays the count of the results.
- -s, --scrollsize=[scrollsize] Number of results to be displayed at a time.

bundle-list-actions (bla) (bundle path) [action set type]

Lists actions added to a bundle.

[action set type] - The type of the action set. If this option is specified, the actions for only this action set are listed. Valid values are Install, Launch, Verify, Uninstall, Terminate, and Preboot.

NOTE: The Terminate action set is not supported for Linux bundles and Linux Patch bundles.

bundle-list-assignments (blas) (bundle or bundle group) [options]

Lists the device and user assignments for a bundle.

Accepts the following options:

- -t, --typefilter=[assignment type] Filters on the assignment type. Valid values are device and user.
- -s, --scrollsize=[scrollsize] Number of results to be displayed at a time.

bundle-list-groups (blg) (bundle path) [options]

Lists the bundle groups of which the given bundle is a member.

Accepts the following options:

-s, --scrollsize=[scrollsize] - Number of results to be displayed at a time.

Examples:

To list all the bundle groups that bundle1 belongs to with five results displayed at a time:

```
zman blg bundlefolder/bundle1 -s 5
```

bundle-list-version (blv) (bundle path)

Lists all the versions of the bundle.

Examples:

To list all the versions of the bundle, zenbundle:

zman blv zenbundle

bundle-move (bmv) (bundle object path) [destination folder path]

Moves a bundle object to a different folder.

(bundle object path): Path of the bundle object (bundle, bundle folder or bundle group) relative to /Bundles

[destination folder path] Path of the bundle folder to which the bundle object is to be moved relative to /Bundles.

bundle-remove-actions (bra) (bundle path) (action set type) [action's positions] [...]

Removes actions from a bundle.

(action set type) - The type of the action set that contains the action. Valid values are Install, Launch, Verify, Uninstall, Terminate, and Preboot.

NOTE: The Terminate action set is not supported for Linux bundles and Linux Patch bundles.

[action's positions] [...] - A comma-separated list of position of actions in the action set. The first action is at position 1. Use the bundle-list-actions command to see the position of a particular action in an action set. This is optional, but if it is not specified, all the actions in the specified action set are removed.

bundle-rename (br) (bundle object path) (new name) [options]

Renames a bundle object.

(bundle object path): Path of the bundle object (bundle, bundle folder or bundle group) relative to /Bundles.

(new name): New name to be given to the bundle object.

-p, --publish =[publish] - If this option is specified and the display name of the bundle is edited, the bundle is immediately published. However, if the current display name of the bundle is different from the existing bundle name or if a sandbox already exists for the bundle, specifying this option will have no effect.

bundle-relocate-actions (brla) (bundle path) (action set type) (Target
action set type) [<action's positions>, <action's positions>,...,<action's
positions>]

Relocates actions from the Source action set type to the Target action set type of a bundle.

(bundle path) - path of the bundle, relative to /Bundles

(action set type) - Type of action set that contains the source action. Valid values are Install, Launch, Verify, Uninstall, Terminate and Preboot.

[Target action set type] - Type of action set that contains the target action. Valid values are Install, Launch, Verify, Uninstall, Terminate and Preboot.

[action's positions]- A comma separated list of the position of each action in the action set. The first action is at position 1. Use bundle-list-actions command to identify the position of a particular action in the action set. This is optional and if not specified, all the actions in the specified action set are relocated.

Examples:

To relocate all actions from the Launch action set to the Install action set of a bundle: zman brla bundlefolder/bundle1 Launch Install

To relocate the first three actions from the Install action set to the Launch action set of a bundle: zman brla bundle1 Install Launch 1,2,3

NOTE: The Terminate action set is not supported for Linux bundles and Linux Patch bundles.

bundle-reorder-actions (broa) (bundle path) (action set type) (current position) (new position)

Reorders actions in the action set of a bundle.

(action set type) - The type of the action set that contains the action. Valid values are Install, Launch, Verify, Uninstall, Terminate, and Preboot.

(current position) - The current position of the action in the action set. The first action is at position 1.

(new position) - The new position to which the action is to be moved. The first action is at position 1.

NOTE: The Terminate action set is not supported for Linux bundles and Linux Patch bundles.

bundle-sandbox-create (bsc) (bundle path) [version of the bundle] [options]

Creates a sandbox from an existing version of a bundle

[version of the bundle] - Specify the version of the bundle to be used for creating the sandbox.

Accepts the following option:

-f, --force =[force] - Overwrites any existing sandbox.

Example:

To create a sandbox from the version 2 of a bundle, zenbundle:

zman bsc zenbundle2

bundle-sandbox-publish (bsp) (bundle path) [options]

Publishes a sandbox to create a published version.

Accepts the following options:

- -f, --force =[force] If a primary bundle has dependent child bundles with the sandbox only version, you must specify this option to publish the changes made both to the primary and the dependent bundles. If you do not specify this option, the publish of the primary bundle also fails.
- -c, --allChild =[all children] If a primary bundle has dependent child bundles with the sandbox version, you can specify this option to publish the changes made both to the primary and the dependent child bundles.
- -i, --incAllParent =[increment all parents] If a primary bundle has parent bundles, you can specify this option to increment the version of the parent bundle to apply the newly published changes made to the primary bundle to the devices that are assigned to the parent bundles.
- -p, --forceParent =[force parent] If a primary bundle has parent bundles and you choose to increment the version of the parent bundle, then you must specify this option to publish any of the parent bundles which already have a sandbox version.

Examples:

To publish the sandbox version of a bundle, zenbundle:

```
zman bsp zenbundle
```

To publish the sandbox version of a bundle named zenbundle1 along with all its dependent bundles:

```
zman bsp zenbundle1 -f -c
```

bundle-sandbox-publish-to-newbundle (bsptn) (original bundle path) (new bundle name) [parent folder] [options]

Publishes a sandbox to a new bundle.

Accepts the following option:

- -s, --createAsSandbox =[create as sandbox] Create the bundle as a sandbox.
- -g, --groups Adds the newly created bundle to all the groups which the primary bundle is member of.
- -d, --deviceAssignments Copies all the device assignments from the primary bundle to the new bundle.
- -u, --userAssignments Copies all the user assignments from the primary bundle to the new bundle.
- -f, --force =[force] If a primary bundle has dependent child bundles with the sandbox only version, you must specify this option to publish the changes made both to the primary and the dependent bundles. If you do not specify this option, the publish of the primary bundle also fails.
- -c, --allChild =[all children] If a primary bundle has dependent child bundles with the sandbox version, you can specify this option to publish the changes made both to the primary and the dependent child bundles.
- -i, --incAllParent =[increment all parents] If a primary bundle has parent bundles, you can specify this option to increment the version of the parent bundle to apply the newly published changes made to the primary bundle to the devices that are assigned to the parent bundles.
- -p, --forceParent =[force parent] If a primary bundle has parent bundles and you choose to increment the version of the parent bundle, then you must specify this option to publish any of the parent bundles which already have a sandbox version.
- -n, --depsToNewFolder =[publish depends bundles to new folder] -Path of the bundle folder in which the dependent bundles are published as new bundles. This folder should not contain any of the dependent bundles selected to be published because the new bundle is published with the same name as the original dependent bundle.

Examples:

To publish the sandbox version of a bundle named zenbundle1 as a new bundle named zenbundle2:

```
zman bsptn zenbundle1 zenbundle2 /Bundles/Folder1
```

To publish the sandbox version of a bundle named zenbundle1 as a new bundle named zenbundle2 and publish the dependent bundles of zenbundle1 as new bundles:

zman bsptn zenbundle1 zenbundle2 /Bundles/Folder1 --depsToNewFolder=/
Bundles/Folder2

bundle-sandbox-revert (bsr) (bundle path)

Deletes the sandbox and reverts to the latest version of the bundle.

Example:

To delete the sandbox of a bundle, zenbundle and revert to the latest version of the bundle:

zman bsr zenbundle

bundle-unassign (bua) (device or user type) (bundle or bundle group)
(device or user object path) [...] [options]

Unassigns a bundle or bundle group from one or more device or user objects.

(device or user type) - Valid values are device, server, workstation, and user.

(device or user object path) [...] - The path of the device or user objects relative to the root folder of the device or user type specified.

Accepts the following option:

-f, --folder=[bundle folder] - The path of a bundle folder relative to /Bundles. If this option is specified, the path of the bundle objects is determined relative to this folder. This can be used to specify multiple bundle objects under the same folder.

bundle-update-assignment (bupa) (device or user type) (bundle or bundle group) (device or user object path) [...] [options]

Updates the assignment between a bundle or bundle group and device or user objects.

(device or user type) - Valid values are device, server, workstation, and user.

(device or user object path) [...] - The path of the device or user objects relative to the root folder of the device or user type specified.

Accepts the following options:

- -f, --folder=[device or user folder] The path of the device or user folder relative to the respective root folder. If this option is specified, the path of the device or user objects is determined relative to this folder. This can be used to specify multiple device or user objects with the same folder.
- -I, --icon-location=[application location XML file] XML file that contains the locations to place the icon for the bundle application. For the XML file format, refer to IconLocation.xml located in /opt/novell/zenworks/share/zman/samples/bundles on a Linux server or Installation_directory:\Novell\Zenworks\share\zman\samples\ bundles on a Windows server.
- -d, --distribution-schedule=[distribution schedule XML or NoSchedule] XML file that contains the distribution schedule or NoSchedule if the schedule must be removed.
- -l, --launch-schedule=[launch schedule XML file or NoSchedule] XML file that contains the launch schedule or NoSchedule if the schedule must be removed.
- -a, --availability-schedule=[availability schedule XML file or NoSchedule] XML file that contains the availability schedule or NoSchedule if the schedule must be removed. For the schedule XML file templates, refer to the XML files located in /opt/novell/zenworks/share/zman/samples/schedules on a Linux server or Installation_directory:\Novell\Zenworks\share\zman\samples\ schedules on a Windows server.
- -i, --install-immediately=[yes or no] Install the bundle immediately after distribution, or remove the same option set during bundle assignment. Valid values are true or yes, and false or no.
- -L, --launch-immediately=[yes or no] Launch the bundle immediately after installation, or remove the same option set during bundle assignment. Valid values are true or yes, and false or no.

- -n, --distribute-now=[yes or no] Sets the distribution schedule to distribute the bundle immediately. If this option is specified, the --distribution-schedule and --distribute-on-devicerefresh options are ignored. The --distribute-now, --distribute-on-device-refresh, and -distribution-schedule options are mutually exclusive and are used to set the distribution schedule. The --distribute-now option is considered first, followed by --distribute-on-devicerefresh and --distribution-schedule.
- -r, --distribute-on-device-refresh=[yes or no] Sets the distribution schedule to distribute the bundle on device refresh, or removes the same option set during bundle assignment. Valid values are true or yes, and false or no. If this option has the value true or yes, the -- distribution-schedule option is ignored and any previously set distribution schedule is overwritten.
- -s, --launch-on-device-refresh=[yes or no] Sets the launch schedule to launch the bundle on device refresh. If this option is specified, the --launch-schedule option is ignored.
- -w, --wakeup-device-on-distribution=[yes or no] Wakes up the device by using Wake-On-LAN if it is shut down while distributing the bundle, or removes the same option set during bundle assignment. Valid values are true or yes, and false or no.
- -B, --broadcast=[Broadcast address][...] A comma-separated list of addresses used to broadcast the Wake-On-LAN magic packets. This option is used only if you choose to wake up the device by using Wake-On-LAN. A valid IP address is a valid value.
- -S, --server=[Path of the Primary or Proxy Server objects relative to /Devices][...] A commaseparated list of Primary or Proxy Server objects used to wake up the device. This option is used only if you choose to wake up the device by using Wake-On-LAN.
- -C, --retries=[Number of retries] Number of times the Wake-On-LAN magic packets are sent to the devices. This option is used only if you choose to wake up the device by using Wake-On-LAN. The value must be between 0 and 5. The default value is 1.
- -T, --timeout=[Time interval between retries] The time interval between two retries. This option is used only if you choose to wake up the device by using Wake-On-LAN. The value must be between 2 and 10 (in minutes). The default value is 2.
- -M --app-installation-schedule=<app installation schedule XML file> A XML file includes the installation schedule.
- -c, --conflicts=[bundle conflict resolution order] Determines how bundle conflicts are resolved.
- Valid values are userprecedence or 1, deviceprecedence or 2. For userprecedence, user-associated bundles are applied first, followed by device-associated bundles. For deviceprecedence, device-associated bundles are applied first, followed by user-associated bundles. If this option is not specified, userprecedence is taken as the default value.

bundle-view-advanced-deployment-status (bvads) (bundle path) [options]

Displays advanced deployment status of a bundle.

Accepts the following options:

- -d, --device=[device path] Displays the deployment status only for the specified device. The path of the device is relative to /Devices.
- -u, --user=[user path] Displays the deployment status only for the specified user. The path of the user is relative to /Users. If device is also specified, status details for the specified user logged into the specified device are displayed.
- -n, --namefilter=[target device name] Filters on the name of the device. Displays options matching the specified filter. The wildcards * and ? can be used if they are enclosed in quotations.

- --statusfilter=[status type][...] Filters on the status of Bundle Distribution and Install Events. Valid values are S, F, and P (Success, Failure, and Pending). A comma-separated list of status types can be given.
- -t, --typefilter=[target device or user type][...] Filters on the type of the target. Valid values are server, workstation, and user. A comma-separated list of target type can be given.
- -s, --scrollsize=[scrollsize] Number of results to be displayed at a time.
- -v, --version [value]

Following are the valid values:

- **published:** Use this option to display number of non-test devices on which the bundle is deployed.
- sandbox: Use this option to display the number of test device on which the sandbox version of the bundle is deployed.
- [version-of-the-object]: Use a version number to get the status of the related bundle version.

The default value is published.

- -c, --status-calculation [value]
 - **consolidated:** Use this option to display the total number of devices on which this bundle is deployed.
 - **version:** Use this option to display the status of specific version.

The default value is version.

bundle-view-assignment-schedule (bvas) (device or user type) (bundle or bundle group) (device or user object path)

Displays the deployment schedules for a bundle assigned to a device or user object.

(device or user type) - Valid values are device, server, workstation, and user.

(device or user object path) [...] - The path of the device or user objects relative to which the bundle group is assigned.

bundle-view-summary-totals (bvst) (bundle path) [options]

Displays a summary of the deployment status of a particular bundle.

Accepts the following options:

```
-v, --version [value]
```

Following are the valid values:

- **published:** Use this option to display number of non-test devices on which the bundle is deployed.
- **sandbox:** Use this option to display the number of test device on which the sandbox version of the bundle is deployed.
- [version-of-the-object]: Use a version number to get the status of the related bundle version.

The default value is published.

- -c, --status-calculation [value]
 - **consolidated:** Use this option to display the total number of devices on which this bundle is deployed.
 - **version:** Use this option to display the status of specific version.

The default value is version.

linux-export-actions (lea) (Action Type) (Action XML File path) (Content Files location Path) [options]

Creates an XML file to export package metadata. Use the baa command to add the exported content to the server.

(Action Type) - Specify the action for which you want to create the XML file. The supported action types are Install RPM and Distribute RPM.

(Action XML File path) - Location of the generated Action Definition XML file.

(Content Files location Path) - Location of the RPM content files on the local machine.

Accepts the following option:

-t, --target - Specify a valid linux distribution target for packages.

```
bundle-appdata-calculation (bac) (bundle path or bundle GUID) [...]
```

Queues a loader action that will calculate and cache application data for bundles, and waits until the action is fully executed. The cached data will be used to prepare web service responses and enhance performance.

NOTE: The zman bac command is applicable only for Patch Policies within ZENworks Patch Management.

Bundle Settings Commands

These commands are used to set and modify bundle settings. Settings commands begin with settings—in the long form, or with the letter s in the short form.

All of the commands below accept the option flags listed in the Global Options section. In addition, they accept individual options as listed with each command.

- "bundle-settings-copy (bscp) (source bundle or bundle folder path) (destination bundle or bundle folder path) [...] [options]" on page 33
- "bundle-settings-export-to-file (bsetf) [options] (XML file path) [settings name] [...]" on page 34
- "bundle-settings-revert (bsrt) (source bundle or bundle folder path) (settings name) [...]" on page 34
- "bundle-settings-set (bss) (XML file path) [destination bundle or bundle folder path] [...]" on page 34

bundle-settings-copy (bscp) (source bundle or bundle folder path) (destination bundle or bundle folder path) [...] [options]

Copies settings.

(source bundle or bundle folder path) - The path of the bundle or bundle folder relative to / Bundles from which settings have to be copied.

(destination bundle or bundle folder path) [...] - The path of the bundles or bundle folders relative to /Bundles to which settings must be copied.

Accepts the following option:

-n, --names=[settings name][...] - Names of the settings to be copied from the source path. If this option is not specified, all settings defined at the source path are copied.

bundle-settings-export-to-file (bsetf) [options] (XML file path) [settings name] [...]

Exports settings data (in XML format) to a file. The XML file is to be used as input for creating or modifying settings.

(XML file path) - The file into which the settings data is stored in XML format. If the file does not exist, a new file is created.

[settings name] [...] - Names of the settings to be exported. If this option is not specified, all settings are exported.

Accepts the following options:

- -s, --source=[source bundle or bundle folder path] The path of the bundle or bundle folder relative to /Bundles from which settings must be exported. If this option is not specified, settings are exported from the Zone.
- -e, --effective If specified, the effective settings are retrieved; otherwise, only the settings defined or overridden at the source path are retrieved.

bundle-settings-revert (bsrt) (source bundle or bundle folder path) (settings name) [...]

Reverts the settings to that of the parent folder.

(source bundle or bundle folder path) - The path of the bundle or bundle folder relative to / Bundles, whose settings must be reverted.

bundle-settings-set (bss) (XML file path) [destination bundle or bundle folder path] [...]

Sets settings at various levels.

(XML file path) - XML file containing exported settings information. Use settings-export-to-file (setf) to export settings information into a XML file.

Accepts the following options:

[settings name] [...] - Names of the settings to be exported. If this option is not specified, all settings are exported.

- -f, --force Forces all children (subfolders and individual bundles) to inherit these settings.
- (zml file path): XML file containing exported settings information. Use bundle-setting-export-to-file (bsetf) to export settings information into a XML file.
- (Destination bundle or bundle folder path): Path of the bundle or bundle folder relative to / Bundle on which settings have to be set. If not specified, settings will be set at the Management Zone level.

Certificate Authority Commands

These commands are used to manage the certificate authority role of ZENworks servers. Certificate authority commands begin with certificate-authority- in the long form, or with the letters ca in the short form.

- "(certificate-authority-export/cae) (file path) [options]" on page 35
- "certificate-authority-import (certificate-authority-import/cai) (file path)" on page 35
- "certificate-authority-role-disable (card)" on page 35
- "certificate-authority-role-enable (care)" on page 35
- "certificate-authority-server (certificate-authority-server/cas)" on page 35

```
(certificate-authority-export/cae) (file path) [options]
```

Exports the key-pair credentials of the zone certificate authority to a file, and optionally disables the Certificate Authority role of the local server.

Accepts the following option:

-d, --disable-CA-role - Removes the Certificate Authority role of the local server.

```
certificate-authority-import (certificate-authority-import/cai) (file
path)
```

Imports the key-pair credentials of the zone certificate authority from a file and enables the Certificate Authority role on the local server.

```
certificate-authority-role-disable (card)
```

Disables the Certificate Authority role on the local server.

```
certificate-authority-role-enable (care)
```

Enables the Certificate Authority role on the local server.

```
certificate-authority-server (certificate-authority-server/cas)
```

Displays the server that has the Certificate Authority role.

Credential Commands

These commands are used to manage the credentials needed for certain ZENworks actions and tasks that require authentication to resources. Credential commands begin with <code>credentials-</code> in the long form, or with the letters <code>cr</code> in the short form.

- * "credentials-create (crc) (credential Name) [folder]) (--userName)
 [--userPassword] [--desc]" on page 36
- "credentials-delete (crd) (credentialPath)" on page 36
- "credentials-folder-create (crf) (folder name) [parent folder] [options]" on page 36
- ◆ "credentials-list (crl) [folder]" on page 36

```
"credentials-move (crm) (credential name) [destination folder path]"
   on page 36
 ◆ "credentials-rename (crr) (credentialPath) (newcredentialPath)" on
 • "credentials-update (cru) (-u --userName=username) [--
   userPassword=password] [-d | --desc=description]" on page 36
credentials-create (crc) (credential Name) [folder]) (--userName) [--
userPassword] [--desc]
   Creates credentials.
   Accepts the following options:
   -u, [--userName=username] - The user name to access the resource.
   [--userPassword=Password] - The password used to access the resource.
   -d, --desc - A description of the credential.
credentials-delete (crd) (credentialPath)
   Deletes credentials.
credentials-folder-create (crf) (folder name) [parent folder] [options]
   Creates a new folder for containing credentials.
   Accepts the following option:
   --desc=[description] - Description for the folder.
credentials-list (crl) [folder]
   Lists credentials.
credentials-move (crm) (credential name) [destination folder path]
   Moves a credential.
credentials-rename (crr) (credentialPath) (newcredentialPath)
   Renames credentials.
credentials-update (cru) (-u | --userName=username) [--
userPassword=password] [-d | --desc=description]
   Creates credentials.
   Accepts the following options:
   -u, --user - The username to access the resource.
   --password - The password used to access the resource.
   -d, --desc - A description of the credential.
```

Contents Commands

The zman contents commands enable you to debug content-related issues easily without having to run complex queries in the database.

```
• "content-create-pending-entry (ccpe) (serverGUID/path)" on page 37
```

```
• "content-trigger-cleanup (ctc)" on page 37
```

- ◆ "content-aco-names (can) (contentGUID) (-s | --scrollsize)" on page 37
- ◆ "content-names-for-aco (cnfa) (ACOPath) (-d | --display-alias) (-v | --version) (-s | --scrollsize)" on page 37

```
content-create-pending-entry (ccpe) (serverGUID/path)
```

Creates a pending entry for missing content in the database, for a given server GUID or path.

Accepts the following arguments:

(serverGUID/path): Specify the server GUID or path for which you want to create pending entries.

Example: zman ccpe ce979ba8949c19fd4a2fe50aaad98470

Where ce979ba8949c19fd4a2fe50aaad98470 is the server GUID.

```
content-trigger-cleanup (ctc)
```

Triggers the content cleanup action, which removes unreferenced content from the database.

```
content-aco-names (can) (contentGUID) (-s | --scrollsize)
```

Retrieves the Assignable Content Object (ACO) names for a given content GUID.

Bundles, Policies and System update objects are referred as ACO.

Accepts the following arguments:

(Content GUID): Specify the content GUID.

(-s, --scrollsize): Maximum number of results to be displayed at a time.

```
content-names-for-aco (cnfa) (ACOPath) (-d \mid --display-alias) (-v \mid --version) (-s \mid --scrollsize)
```

Retrieves the content GUIDs for the specified ACO path.

Accepts the following arguments:

(ACOPath): Specify the ACO path for Bundles, Policies or System Update.

(-d | --display-alias): Specify this argument to display the alias of the ACO.

(-v | --version): Specify a non-negative version number of the ACO. Valid values are sandbox and the actual version of the object. If the version is not specified, then the published or standalone sandbox version is considered.

(-s, --scrollsize): Maximum number of results to be displayed at a time.

Example 1: To view the content GUID and the name of a specified version of the ACO object, use:

```
zman cnfa /Bundles/bundle1 -v 1
```

Where Bundle1 is the name and 1 is the version number of the bundle.

Example 2: To view the content GUID and the name of the sandbox version of the ACO object, use:

```
zman cnfa /Bundles/bundle1 -v sandbox
```

Where Bundle1 is the name and sandbox is the version of the bundle.

Example 3: To view the content GUID and the name of the published/standalone sandbox version of the ACO,

```
zman cnfa /Policies/policy1
```

NOTE: If the version is not specified, then the highest version of the object will be displayed.

Database Commands

These commands are used to manage the embedded PostgreSQL database. Database commands begin with database- in the long form, or with the letter d in the short form.

NOTE: These commands cannot be used to manage an external PostgreSQL database.

- "database-get-credentials-audit (dgca) and database-get-credentials (dgc)" on page 38
- ◆ "database-get-credentials-superuser (dgcs)" on page 38
- ◆ "database-backup (db) (backup directory)" on page 38

database-get-credentials-audit (dgca) and database-get-credentials (dgc)

Retrieves the credentials used to connect to the Audit Embedded PostgreSQL database and Embedded PostgreSQL database.

```
database-get-credentials-superuser (dgcs)
```

Retrieves the super user credentials used to connect to the Embedded PostgreSQL database.

```
database-backup (db) (backup directory)
```

Backs up the embedded PostgreSQL database or the network locations where the database files are backed up.

(backup directory) - The local directory on the database server or the network location where the database files are backed up. Ensure that the parent directory already exists and has sufficient disk space. Any existing database files in the directory are overwritten.

Deployment Commands

These commands are used to perform deployment tasks. Deployment commands begin with deployment - in the long form, or with the letters dp in the short form.

- "deployment-task-abort (dpta) (deployment task name) [...]" on page 39
- "deployment-task-create (dptc) (deployment task name) (user credential file) [IP address/DNS name] [...] [options]" on page 39
- "deployment-task-delete (dptd) (deployment task name) [...]" on page 39
- "deployment-task-list (dptl) [options]" on page 39
- "deployment-task-run-now (dptrn) (deployment task name) [...]" on page 39

deployment-task-abort (dpta) (deployment task name) [...]

Aborts the deployment task.

deployment-task-create (dptc) (deployment task name) (user credential file) [IP address/DNS name] [...] [options]

Creates a deployment task to deploy the ZENworks Agent to devices by using the IP address or DNS name.

(user credential file) - The path of the file containing the credentials to connect to the device. Each line in the file should have a username and password separated by a space. For example, administrator password.

Accepts the following options:

- -f, --file=[IP address file][...] A comma-separated list of file paths containing the IP addresses or DNS names of devices to which the ZENworks Agent should be deployed. The file can contain a list of IP addresses or DNS names of devices in comma-separated-value (CSV) format, or one IP address or DNS name on each line.
- -s, --schedule=[launch schedule XML file] XML file that contains the launch schedule. For the schedule XML file templates, refer to the XML files located in /opt/novell/zenworks/ share/zman/samples/scheduleson a Linux server or Installation_directory:\Novell\Zenworks\share\zman\samples\ schedules on a Windows server. If the schedule file or the --run-now option is not specified, the task is not scheduled to run.
- -r, --run-now Schedules the deployment task to run immediately after creation.
- -b, --reboot=[Reboot option] Indicates when the device must be rebooted after deploying the agent. Valid values are immediate and manual.
- -d, --desc=[description] Description for the deployment task.
- -p, --proxy=[Windows Proxy] The path of a Windows device relative to /Devices. In order to deploy management agents to Microsoft Windows devices from a Linux Primary Server, a managed device running Microsoft Windows is needed. Ignore this option if you are running the deployment task from a Windows Primary Server.
- -t, --timeout=[Time out] The number of seconds you want the Primary Server to wait for a response from the Windows Proxy.
- -k, --key=[Registration key] Registration key for registering the device.

deployment-task-delete (dptd) (deployment task name) [...]

Deletes the deployment task.

deployment-task-list (dptl) [options]

Lists the deployment tasks and the status.

Accepts the following options:

- -n, --namefilter=[filter string] Displays results matching the specified name. The wildcards * and ? can be used if they are enclosed in quotations marks.
- -c, --count Displays the count of the results.
- -s, --scrollsize=[scrollsize] Number of results to be displayed at a time.

deployment-task-run-now (dptrn) (deployment task name) [...]

Schedules the specified deployment task to run immediately. The task should have the credentials saved in the data store.

Discovery Commands

These commands are used to view device discovery-related information. Discovery commands begin with discovery- in the long form, or with the letter d in the short form.

All of the commands below accept the option flags listed in the Global Options section. In addition, they accept individual options as listed with each command.

- "discovery-view-discovered-devices (dvdd) [options]" on page 40
- "discovery-task-list (dtl) [options]" on page 40
- "discovery-task-run-now (dtrn) (discovery task name)" on page 40

discovery-view-discovered-devices (dvdd) [options]

Lists the discovered devices.

Accepts the following options:

- -n, --nameFilter=[filter string] Displays the devices matching the specified filter. The wildcard * can be used if it is enclosed in quotations.
- -t, --typefilter=[type filter] Displays options matching the specified type. Valid values are server, workstation, printer, network, thinclient, other, unknown, and deployable. If this option is not specified, all types of devices are displayed.
- -o, --osfilter=[operating system] Displays devices having the specified OS installed. Valid values are other, win9x, winnt, wince, win2k, win2k3, winxp, nw6, nw6_5, nwoes, suse, sles, nld, rh_es, and rh_as. If this option is not specified, all devices are displayed.
- -m, --management-status=[management status] Displays devices having the specified status. Valid values are discovered, inventoried, managed, and retired. If this option is not specified, all types of devices are displayed regardless of their status.
- --modefilter=[discovery mode] Displays the devices discovered by using the specific discovery mode. Valid values are IP, LDAP, csvimport, ZENworks-migration, and ZAM-migration. If this option is not specified, all devices are displayed.
- -s, --scrollsize=[scrollsize] Number of results to be displayed at a time.

discovery-task-list (dtl) [options]

Lists the discovery tasks and the status.

Accepts the following options:

- -n, --namefilter=[filter string] Displays results matching the specified name. The wildcards * and ? can be used if they are enclosed in quotation marks.
- -s, --scrollsize=[scrollsize] Number of results to be displayed at a time.

discovery-task-run-now (dtrn) (discovery task name)

Executes the specified discovery task immediately.

Dynamic Group Commands

These commands are used to view dynamic groups, group members, and to refresh a group. Dynamic group commands begin with <code>dynamic-group-</code> in the long form, or with the letters <code>dg</code> in the short form.

- "dynamic-group-list (dgl) (device type) [folder] [-n|-namefilter=filter string] [-s|--scrollsize=scroll size] [-r|-recursive] [-c|--count]" on page 41
- * "dynamic-group-members (dgm) (device type) (dynamic group name)
 [path of the dynamic group folder] [-s|--scrollsize=scroll size]" on
 page 41
- "dynamic-group-refresh (dgr) (device type) [(dynamic group name) (dynamic group name)... (dynamic group name)] [-f|--folder=folder name including path of the dynamic group folder] [-a|--all]" on page 42
- "dynamic-group-view-query (dgvq) (path of the dynamic group folder)" on page 42

dynamic-group-list (dgl) (device type) [folder] [-n|--namefilter=filter string] [-s|--scrollsize=scroll size] [-r|--recursive] [-c|--count]

Lists the dynamic groups.

Accepts the following options:

(device type) - Valid values are server and workstation.

[folder] - Lists the content of the specified folder. If it is not specified, the content of the root folder is displayed.

[-n|--namefilter=filter string] - Displays the results matching the specified name. The wildcards * and ? can be used if they are enclosed in quotation marks.

[-s | --scrollsize=scroll size] - Number of results to be displayed at a time.

[-r|--recursive] - Lists the results recursively, including subfolders. If it is not specified, the contents of subfolders are not listed.

[-c|--count] - Displays the count of the results.

dynamic-group-members (dgm) (device type) (dynamic group name) [path of the dynamic group folder] [-s|--scrollsize=scroll size]

Lists the members of the specified dynamic group.

Accepts the following options:

(device type) - Valid values are server and workstation.

(dynamic group name) - Name of the dynamic group.

[path of the dynamic group folder] - The path of the dynamic group. You can specify either the complete path or the relative path of the root folder.

[-s | --scrollsize=scroll size] - Number of results to be displayed at a time.

dynamic-group-refresh (dgr) (device type) [(dynamic group name) (dynamic group name)... (dynamic group name)] [-f|--folder=folder name including path of the dynamic group folder] [-a|--all]

Recalculates the membership in the dynamic group based on the criteria established for the group.

Accepts the following options:

(device type) - Valid values are server and workstation.

(dynamic group name) - Name of the dynamic group. You can list multiple groups.

[-f|--folder=folder name including path of the dynamic group folder] - Dynamic group folder's name, including its full path.

[-a|--all] - Refresh all existing dynamic groups.

dynamic-group-view-query (dgvq) (path of the dynamic group folder)

Lists the filters for the specified dynamic group.

(path of the dynamic group folder) - Path of the dynamic group. You can either specify the complete path or the relative path of the root folder

Endpoint Security Management Commands

These commands are used to import and export security policies and to export a Management Zone's security policy encryption key (KMK). They apply only to ZENworks Endpoint Security Management.

All of the commands below accept the option flags listed in the Global Options section, with the exception that the esmpolicy-export-to-file and esmpolicy-import commands cannot be run remotely and therefore do not accept the --host option.

- "esmpolicy-export-to-file (epetf) (policy path) (XML policy file path)" on page 42
- "esmpolicy-export-kmk-to-file (epektf) (policy encryption key file path)" on page 43
- "esmpolicy-import (epi) (policy name) (policy encryption key file path) (XML policy file path) [parent folder]" on page 43
- "esmpolicy-purge-effective-policies (epep) [(device path)(device path)...(device path)] [-b|--begin-date=yyyy-MM-dd HH:mm:ss] [e|end-date=yyyy=MM-dd HH:mm:ss] [-u|--unregisteredDevices]" on page 43

```
esmpolicy-export-to-file (epetf) (policy path) (XML policy file path)
```

Exports a security policy's information to an encrypted XML policy file. The XML policy file can be used to import the policy to the same Management Zone or a different Management Zone.

NOTE: To import a policy, you must also supply the zone's security policy encryption key (KMK) so that the encrypted XML policy file can be decrypted. Use the <code>esmpolicy-export-kmk-to-file</code> command to create the key file.

(policy path) - The path (including the filename) of the policy object relative to the Policies root folder. For example, FWpolicy1 or ESMpolicies/DEpolicy4.

(XML policy file path) - The path (including the filename) where you want to save the XML policy file. If you specify a filename only, the file is saved to the current directory. For example, firewallpolicy.xml or c:\firewallpolicy.xml.

Examples:

```
zman epetf FWPolicy1 c:\FWpolicy1.xml
zman epetf ESMpolicies/DEpolicy4 DEpolicy4.xml
```

```
esmpolicy-export-kmk-to-file (epektf) (policy encryption key file path)
```

Exports the Management Zone's security policy encryption key (KMK) to a file. The key file is required to decrypt an XML policy file (that was exported from a policy in the zone) when importing the policy with the <code>esmpolicy-import</code> command.

(policy encryption key file path) - The path (including filename) where you want to save the security policy encryption key (KMK) file. If you specify a filename only, the file is saved to the current directory. Use any supported filename for the file. The extension is not important; you can use any extension or no extension. For example, KMK.txt, key.xml, KMK, and decryption.file are all valid filenames.

Examples:

```
zman epektf c:\key.txt
zman epektf EncryptionKey.xml
```

esmpolicy-import (epi) (policy name) (policy encryption key file path) (XML policy file path) [parent folder]

Imports a security policy from an encrypted XML file created by the <code>esmpolicy-export-to-file</code> command.

(policy name) - The name to assign to the policy object.

(policy encryption key file path) - The full path (including filename) of the security policy encryption key (KMK) file for the Management Zone from which the policy was exported. This file is required to decrypt the encrypted XML file. If the key file is in the current directory, specify the filename only.

(XML policy file path) - The full path (including filename) of the encrypted XML policy file. If the file is in the current directory, specify the filename only.

[parent folder] - The Policies folder in which to create the policy object. If you want to create the object in the root folder, ignore this option.

Examples:

```
zman epi FWPolicy c:\key.txt c:\FWpolicy.xml
zman epi DEPolicy key.txt encryptionpolicy.xml esmpolicies/encryption
```

```
esmpolicy-purge-effective-policies (epep) [(device path)(device path)...(device path)] [-b|--begin-date=yyyy-MM-dd HH:mm:ss] [-e|end-date=yyyy=MM-dd HH:mm:ss] [-u|--unregisteredDevices]
```

Purges effective policy report records from the ZENworks database. The following options can be used to target report records for specific devices or for specific time periods.

[(device path) (device path) ... (device path)]: To purge the effective policy report records for specific devices, specify the full path for each device. Ignore this option to purge reports for all devices.

This command accepts the following options:

[-b|--begin-date=yyyy-MM-dd HH:mm:ss]: To purge effective policy report records starting with a specific date, specify the begin date. All records with a timestamp on or after the begin date are purged. Use this option with the end-date option to designate a specific time period.

[-e|--end-date=yyyy=MM-dd HH:mm:ss]: To purge effective policy report records up to a specific date, specify the end date. All records with a timestamp on or before the end date are purged. Use this option with the begin-date option to designate a specific time period.

[-u|--unregisteredDevices]: Purge effective policy report records for devices that are no longer registered in the zone but that still have report data in the ZENworks database.

Examples:

```
zman epep /Devices/Workstations/device1
zman epep /Devices/Workstations/device1 -b "2010-10-10 10:10:10" -e
"2010-12-31 24:00:00"
zman epep -u
```

Full Disk Encryption Commands

These commands apply only to ZENworks Full Disk Encryption. In addition to the parameters listed below, the commands accept the option flags listed in the Global Options section.

- "fdepolicy-export-to-file (fpetf) (policy path) (XML policy file path)" on page 45
- "fdepolicy-import (fpi) (policy name) (policy encryption key file path) (XML policy file path) [parent folder]" on page 45
- "fdepolicy-export-kmk-to-file (fpektf) (policy encryption key file path)" on page 45

```
fdepolicy-purge-eri (fpe) [(device path)(device path)...(device path)] [-
b|--begin-date=yyyy-MM-dd HH:mm:ss] [-e|end-date=yyyy=MM-dd HH:mm:ss] [-
u|--unregisteredDevices]
```

Purges emergency recovery information (ERI) records from the ZENworks database. The following options can be used to target records for specific devices or for specific time periods.

[(device path) (device path)... (device path)]: To purge the ERI records for specific devices, specify the full path for each device. Ignore this option to purge records for all devices.

[-b|--begin-date=yyyy-MM-dd HH:mm:ss]: To purge ERI records starting with a specific date, specify the begin date. All records with a timestamp on or after the begin date are purged. Use this option with the end-date option to designate a specific time period.

[-e|--end-date=yyyy=MM-dd HH:mm:ss]: To purge ERI records up to a specific date, specify the end date. All records with a timestamp on or before the end date are purged. Use this option with the begin-date option to designate a specific time period.

[-u|--unregisteredDevices]: Purge ERI records for devices that are no longer registered in the zone but that still have ERI records in the ZENworks database.

Examples:

```
zman fpe /Devices/Workstations/device1
```

```
zman fpe /Devices/Workstations/device1 -b "2010-10-10 10:10:10" -e
"2010-12-31 24:00:00"
zman fpe -u
```

fdepolicy-export-to-file (fpetf) (policy path) (XML policy file path)

Exports a full disk encryption policy's information to an encrypted XML policy file. The XML policy file can be used to import the policy to the same Management Zone or a different Management Zone.

NOTE: To import a policy, you must also supply the zone's full disk encryption policy encryption key (KMK) so that the encrypted XML policy file can be decrypted. Use the fdepolicy-export-kmk-to-file command to create the key file.

(policy path) - The path (including the filename) of the policy object relative to the Policies root folder. For example, FDEpolicies/FDEpolicy4.

(XML policy file path) - The path (including the filename) where you want to save the XML policy file. If you specify a filename only, the file is saved to the current directory. For example, FDEpolicy.xml.

Example:

```
zman fpetf FDEPolicy1 c:\FDEpolicy1.xml
```

fdepolicy-import (fpi) (policy name) (policy encryption key file path) (XML policy file path) [parent folder]

Imports a full disk encryption policy from an encrypted XML file created by the fdepolicy-export-to-file command.

(policy name) - The name to assign to the policy object.

(policy encryption key file path) - The full path (including filename) of the full disk encryption policy encryption key (KMK) file for the Management Zone from which the policy was exported. This file is required to decrypt the encrypted XML file. If the key file is in the current directory, specify the filename only.

(XML policy file path) - The full path (including filename) of the encrypted XML policy file. If the file is in the current directory, specify the filename only.

[parent folder] - The Policies folder in which to create the policy object. If you want to create the object in the root folder, ignore this option.

Example:

```
zman fpi FDEPolicy c:\key.txt c:\FDEpolicy.xml
```

fdepolicy-export-kmk-to-file (fpektf) (policy encryption key file path)

Exports the Management Zone's full disk encryption policy encryption key (KMK) to a file. The key file is required to decrypt an XML policy file (that was exported from a policy in the zone) when importing the policy with the fdepolicy-import command.

(policy encryption key file path) - The path (including filename) where you want to save the full disk encryption policy encryption key (KMK) file. If you specify a filename only, the file is saved to the current directory. Use any supported filename for the file. The extension is not important; you can use any extension or no extension. For example, KMK.txt, key.xml, KMK, and decryption.file are all valid filenames.

Examples:

```
zman fpektf c:\key.txt
zman fpektf EncryptionKey.xml
```

Hotlist Command

This command is used to view the list of devices that have unacknowledged warnings or errors. The Hotlist command begins with hotlist- in the long form, or with the letter hl in the short form.

In addition, it accepts individual options as listed with the command.

• "hotlist-view (hlv) [options]" on page 46

```
hotlist-view (hlv) [options]
```

Lists devices that have unacknowledged warnings or errors.

Accepts the following options:

- -c, --count Displays only the count of the hotlist items.
- -t, --type=[error type] Filters on the error type of hotlist items. Valid values are Noncompliant, Critical, and Warning.
- -o, --operator=[comparison operator] If specified, this operator is used in error-count-based filtering. Valid values are >, >=, =, <, and <=. Enclose the operators in double quotation marks so that > and < are not considered by the system as redirection operators.
- -e, --errorcount=[erorr count] Filter by the count of the error type specified. If the comparison operator is not specified, the >= is used by default. If error type is not specified, the count is taken as the sum of noncompliant, critical and warning errors.
- -s, --scrollsize=[scrollsize] Number of results to be displayed at a time. Warning or errors can be acknowledged by using the messages-acknowledge command. When all warnings or errors for a device are acknowledged the messages no longer appear on the hotlist.

Example: To view devices in hotlist that have more than 5 critical errors:

```
zman hlv --type critical --operator ">" --error-count 5
```

Intel AMT Commands

These commands are used to perform Preprovisioning, Provisioning, and Management operations on the Intel AMT devices. The Intel AMT commands begin with iamt- in the long form, or with the letter i in the short form.

The supported iAMT versions in ZENworks are 3, 4, 5, and 6.

- "iamt-root-certificate-hash (irch)" on page 46
- "iamt-create-mgmtcert (icmc) [options]" on page 47
- ◆ "iamt-create-csr (icc) (isCA) (type) [options]" on page 47
- "iamt-clear-mgmtcert (idmc)" on page 47
- ◆ "iamt-cacert-import (icai) [isclear] [options]" on page 47

iamt-root-certificate-hash (irch)

Prints the ZENworks Root Certificate hash.

iamt-create-mgmtcert (icmc) [options]

Creates or imports the Intel AMT Provisioning or Management Certificate in the . DER format on every Primary Server that is used as an iAMT Provisioning or Management Server.

Accepts the following options if you are importing an external certificate:

-p, --certpath - Specify the path of the Intel AMT Provisioning / Management Certificate that is signed by the External CA. The certificate should be in the .DER format

For example, to import an external certificate, run the following command:

```
zman icmc --certpath C:\Certificate.DER
```

iamt-create-csr (icc) (isCA) (type) [options]

Creates the Certificate Request for the Intel AMT Provisioning / Management Server or the AMT device in an External CA environment.

isCA - The valid values are True or False. If true, the Certificate Request generates the certificate for the Intel AMT Management Zone.

Type - Valid values are mgmt or device. The Certificate Request is created for the Management Zone or for specific devices in the Management Zone.

Accepts the following options:

- -c, --country=[country name] Specify the name of the country.
- -s, --state=[state name] Specify the name of the state.
- -o, --organization=[organization name] Specify the name of the organization.
- -u, --orgunit=[Organization Unit] Specify the organization unit.
- -n, --commonname=[Common name] Specify the common name of the certificate.
- -d, --destination-folder=[Destination Folder]: Specify the path of the destination folder where you want to copy the Certificate Signing Request file.

iamt-clear-mgmtcert (idmc)

Clears the Intel AMT Provisioning / Management Certificate.

iamt-cacert-import (icai) [isclear] [options]

Imports the External CA or its subordinate CA on the server.

[isclear] - The valid values are True or False. If true, the imported External CA or its subordinate CA is deleted.

Accepts the following options if you are importing an External CA or its subordinate CA:

- -i, --inform Specifies whether the certificate format is PEM or DER.
- -p, --cacertpath Specifies the certificate path.

Imaging Command

This commands is used to perform Imaging operations. Imaging commands begin with imaging-in the long form, or with the letter i in the short form.

• "imaging-apply-assigned-imaging-bundle (iaaib) (device type) (device name)" on page 48

```
imaging-apply-assigned-imaging-bundle (iaaib) (device type) (device name)
```

Applies the latest preboot bundle that is directly assigned to the selected device. If there are no direct assignments available, this command applies the first preboot bundle that belongs to the inherited assignments of the selected device. The bundle is applied next time when the device checks for preboot work.

Accepts the following options:

(Device type) - Valid values are server and workstation.

(Device name) - Name of the server or workstation object.

For example, to apply the assigned Imaging bundle to a server with the name server1, run the following command:

```
zman iaaib server server1
```

If the device object is located within a folder, use the following command:

```
iaaib (Device type) (folder/path of device)/(Device name)
```

where folder/path of device is the relative path of the device within the Workstation or Server folder.

If you have multiple workstations in a directory, and the name of the workstations is prepended by common alphanumeric characters (for example, dev091, dev092,...dev099), use the following command from a Linux server to simultaneously apply the assigned imaging bundle on multiple devices:

```
zman iaaib workstation folderx/dev\{09\{1,2,3,4,5,6,7,9\}\}
```

The bundle is applied to devices dev091, dev092, and so on.

Inventory Commands

These commands are used to initiate scans and send an inventory data collection form to the managed devices. Inventory commands begin with inventory—in the long form, or with the letter i in the short form.

- "inventory-collection-wizard-run-now (icwrn) (device object path)
 [...] [options]" on page 49
- "(inventory-scan-now|isn) (<device object path> <device object path>...<device object path>) [options]" on page 49
- "inventory-export-localproducts|ielp (pathname)" on page 49
- "inventory-import-localproducts|iilp (pathname) [dokbmerge]" on page 49

inventory-collection-wizard-run-now (icwrn) (device object path) [...] [options]

Sends the inventory data collection form to one or more devices.

Accepts the following option:

-f, --folder=[device folder] - The path of the device folder relative to /Devices. If this option is specified, the path of the device objects is determined relative to this folder. This option can be used to specify multiple device objects under the same folder.

(inventory-scan-now|isn) (<device object path> <device object path>...<device object path>) [options]

Initiates an inventory scan of one or more devices.

Accepts the following option:

-f, --folder=[device folder] - The path of the device folder relative to /Devices. If this option is specified, the path of the device objects is determined relative to this folder. This option can be used to specify multiple device objects under the same folder.

inventory-export-localproducts|ielp (pathname)

Exports the administrator-defined local products and product fingerprints. Only administrators with CDLP rights can export the local products.

To export product data:

```
zman ielp {pathname}.
```

Example:

To export all administrator-defined local products from ZENworks Configuration Management to a file in ./output/lpexports.txt:

```
zman ielp ./output/lpexports.txt.
```

inventory-import-localproducts | iilp (pathname) [dokbmerge]

Imports the administrator-defined local products and product fingerprints. Only administrators with CDLP rights can import the local products.

dokbmerge - To trigger KB merge after importing local product(s).

To import product data:

```
zman iilp {pathname} [-U (Administrator)] [-P (password)].
```

Example:

To import administrator-defined local products to ZENworks Configuration Management from a file in ./output/lpimports.txt:

```
zman iilp ./output/lpimports.txt -U Administrator -P novell.
```

License Commands

These commands are used to activate your ZENworks server or to display licensing information. License commands begin with license- in the long form, or with the letter 1 in the short form.

All of the commands below accept the option flags listed in the Global Options section. In addition, they accept individual options as listed with each command.

- "license-activate (la) (product name) (license key)" on page 50
- "license-deactivate (ld) (product name)" on page 50
- "license-info (li)" on page 50
- "license-refresh (lr)" on page 50
- "license-show-active-components (lsac)" on page 50

license-activate (la) (product name) (license key)

Activates the ZENworks products (Asset Inventory for Linux, ZENworks Configuration Management, ZENworks Asset Management, ZENworks Full Disk Encryption, ZENworks Endpoint Security Management) or the ZENworks Suite.

license-deactivate (ld) (product name)

Deactivates the ZENworks products. Only the product name is needed as an argument.

license-info (li)

Displays the licensing information.

license-refresh (lr)

Forces the system to refresh the stored license cache, which is normally updated once per day. Use this command to update the cache at any time, such as when an evaluation license might expire and the cache doesn't yet reflect that.

license-show-active-components (lsac)

Lists the current license states of all known ZENworks Configuration Management components and DataModel plug-ins (two separate lists).

Location Commands

These commands are used to view and manage locations. A location consists of one or more network environments. When the ZENworks Agent determines that its current environment matches a network environment associated with a location, the agent enforces any security policies and closest server rules assigned to the location.

Location commands begin with location—in the long form, or with the letter 1 in the short form. All of the commands below accept the option flags listed in the Global Options section. In addition, they accept individual options as listed with each command.

- "location-assign-device-folder (ladf) (Device Folder or Device Object Path) [<Location Object> <Location Object>...<Location object>] [-a|--allLocations]" on page 51
- "location-audit-upload (lau) (location name) (state)" on page 51

- ◆ "location-create (lc) (location name) [-d|--desc=<description>] [network environment name] [...]" on page 51
- "location-delete (ldel) (location name) [...]" on page 52
- "location-delete-all-network-assignments (ldana) (location name)" on page 52
- "location-delete-network-assignments (ldna) (location name) [network environment name] [...]" on page 53
- "location-list (ll) [options]" on page 53
- "location-list-network-assignments (llna) (location name)" on page 53
- "location-list-relationships (llrel) (location name) [-c count]" on page 53
- "location-network-assign (lna) (location name) (network environment name) [...]" on page 53
- "location-rename (lrn) (old name) (new name)" on page 53
- "location-response-recompute|lrr [<Device Folder or Device Object Path> <Device Folder or Device Object Path>...<Device Folder or Device Object Path>] [-f|--forceRecompute]" on page 53
- "location-throttle (lt) (location name) (throttle rate)" on page 54
- "location-unknown-throttle (lut) (throttle rate)" on page 54
- "location preferred protocol communication | lppc <location name>
 [options]" on page 54

location-assign-device-folder (ladf) (Device Folder or Device Object Path) [<Location Object> <Location Object>...<Location object>] [-a|--allLocations]

Assigns a location to a particular device folder or device object.

(Device Folder or Device Object Path) - Complete path of the device folder or device object.

[Location Object] [...] - Name of the location object.

-a, --allLocations - Specify this parameter to assign all the locations and network environments to the device folder or device object.

location-audit-upload (lau) (location name) (state)

Configures the audit data upload for a specified location.

(location name) - The name of the location.

(state) - Select the state:

- 1 to enable devices in the associated location to upload audit event data to any Satellite Server (Collection role) or Primary Server.
- 2 to disable devices in the associated location from uploading audit event data to any Satellite Server (Collection role) or Primary Server.

location-create (lc) (location name) [-d|--desc=<description>] [network environment name] [...]

Creates a location and (optionally) assigns network environments to the location.

(location name) - The name you want assigned to the new location.

[network environment name] - The name of an existing network environment that you want to assign to the location. You can add multiple network environments. Adding network environments during creation of a location is optional. You can use the location-nwenv-assign command to add network environments after creation.

[network environment name] - The name of an existing network environment that you want to assign to the location. You can add multiple network environments. Adding network environments during creation of a location is optional. You can use the location-nwenv-assign command to add network environments after creation.

Accepts the following options:

- -d |--desc=description: Specify a description for the location.
- -t | -- downloadThrottle=Download Throttle rate: Specify a download throttle rate.
- -u | -- uploadThrottle=Upload Throttle rate Specify an upload throttle rate.
- -a | -- auditUpload=Audit upload data Specify 0 to enable or 1 to disable the audit upload data.
- **-e | -- Preferred protocol for communication** Based on your preferred protocol for communication, specify either IPv4 or IPv6.

Specify IPv4 if you want the devices in this location to try communicating with the servers using IPv4 URLs first before attempting IPv6 URLs.

Specify IPv6 if you want the devices in this location to try communicating with the servers using IPv6 URLs first before attempting IPv4 URLs.

- **C** | -- cifsServer=CIFS Server: Specify a CIFS server that allows you to provide share access.
- -i | --proxyAddress=IPv4 HTTP Proxy Address Specify an IPv4 proxy address.
- -p | --proxyPort= IPv4 HTTP Proxy Port: Specify the port number on which the proxy server should listen.
- -r | --proxyCidr=IPv4 HTTP Proxy CIDR: Specify the range of IPv4 address using CIDR notation.
- -x | --ipv6ProxyAddress=IPv6 HTTP Proxy Address Specify an IPv6 proxy address
- -y -ipv6ProxyPort=IPv6 HTTP Proxy Port: Specify the port number on which the proxy server should listen.
- -z | -- ipv6ProxyCidr=IPv6 HTTP Proxy CIDR: Specify the range of IPv6 address using CIDR notation.

```
location-delete (ldel) (location name) [...]
```

Deletes locations.

(location name) - The name of the location you want to delete. You can specify one or more location names.

location-delete-all-network-assignments (ldana) (location name)

Removes all network environments from a location.

(location name) - The name of the location from which you want to remove all assigned network environments.

location-delete-network-assignments (ldna) (location name) [network environment name] [...]

Removes specific network environments from a location.

(location name) - The name of the location from which you want to remove network environments.

[network environment name] - The name of the network environment that you want to remove. You can remove multiple network environments.

location-list (11) [options]

Lists locations.

Accepts the following options:

- -c, --count Displays the count of the results.
- -s, --scrollsize=[scrollsize] Number of results to be displayed at a time.

location-list-network-assignments (llna) (location name)

Lists the network environments assigned to a location.

(location name) - The name of the location whose network environments you want to view.

Accepts the following options:

- -c, --count Displays the count of the results.
- -s, --scrollsize=[scrollsize] Number of results to be displayed at a time.

location-list-relationships (llrel) (location name) [-c count]

Lists the ZENworks objects such as policies and bundles that are associated with the specified location.

(location name) - The name of the location whose ZENworks objects you want to view.

Accepts the following option:

-c, --count - Displays the count of the results.

location-network-assign (lna) (location name) (network environment name) [...]

Adds network environments to a location.

(location name) - The name of the location to which you want to assign network environments.

[network environment name] - The name of an existing network environment that you want to add to the location. You can add multiple network environments.

location-rename (lrn) (old name) (new name)

Renames a location.

(old name) - The name of the location that you want to rename.

(new name) - The new name for the location.

location-response-recompute | lrr [<Device Folder or Device Object Path> <Device Folder or Device Object Path>...<Device Folder or Device Object Path>] [-f|--forceRecompute]

Requests the server to recompute the location configuration response so that the requesting devices can obtain the latest changes.

[Device Folder or Device Object Path][...]: Specify the path of a device folder or device object.

-f, --forceRecompute: Force recompute all the location configuration responses.

location-throttle (lt) (location name) (throttle rate)

Sets the bandwidth throttle rate to be used for distributing content to devices identified with the specified location. To maximize performance of your ZENworks Servers and network system, high bandwidth environments can use one set of throttle rates and low bandwidth environments can use a different set of throttle rates. The throttle rate can be overridden in a bundle so that high-priority patch and bundle content can be deployed quickly.

(location name) - The name of the location for which you want to define the bandwidth throttle rate.

(throttle rate) - The maximum bandwidth rate in kilobits per second (kbps).

location-unknown-throttle (lut) (throttle rate)

Sets the bandwidth throttle rate to be used for distributing content to devices identified with the Unknown location.

(throttle rate) - The maximum bandwidth rate in kilobits per second (kbps).

location preferred protocol communication | lppc <location name> [options] Edits an existing location.

<location name>: Specify a name for the location.

Accepts the following options:

IPv4: Specify IPv4 if you want the devices in this location to try communicating with the servers using IPv4 URLs first before attempting IPv6 URLs.

IPv6: Specify IPv6 if you want the devices in this location to try communicating with the servers using IPv6 URLs first before attempting IPv4 URLs.

Message Commands

These commands are used to view and manage messages. Message commands begin with message- in the long form, or with the letter m in the short form.

All of the commands below accept the option flags listed in the Global Options section. In addition, they accept individual options as listed with each command.

- "(messages-acknowledge ma) [object path] [options]" on page 54
- "(messages-delete|md) [object path] [options]" on page 55
- "messages-view (mv) [options] [object path]" on page 55

(messages-acknowledge|ma) [object path] [options]

Acknowledges messages associated with a ZENworks managed device, bundle, or policy.

[object path] - Full path of the object that has messages associated with it. The object can be a server, workstation, bundle, or policy.

Accepts the following options:

-b, --begin-date=[message logged date] - Messages logged on and after this date are acknowledged. The format for the date is YYYY-MM-DD.

- -e, --end-date=[message logged date] Messages logged on and before this date are acknowledged. The format for the date is YYYY-MM-DD.
- -a, --all-Acknowledges all messages logged for the object. If an object is not specified, all the logged messages are acknowledged.
- -1, --logID=[log id][...] A comma-separated list of log IDs of the messages to be acknowledged. You can obtain the log IDs by using the messages-view command.
- -L, --logID-file=[file path] The path of the file containing message log IDs. Each line in the file should contain a message log ID. Use this option instead of the --log-ID option to input the log IDs.

(messages-delete | md) [object path] [options]

Deletes messages associated with a ZENworks managed device.

[object path] - Full path of the object that has messages associated with it. The object can be a server, workstation, bundle, or policy.

Accepts the following options:

- -b, --begin-date=[message logged date] Messages logged on and after this date are deleted. The format for the date is YYYY-MM-DD.
- -e, --end-date=[message logged date] Messages logged on and before this date are deleted. The format for the date is YYYY-MM-DD.
- -1, --logID=[log ID][...] A comma-separated list of log IDs of the messages to be deleted. You can obtain the log IDs by using the messages-view command.
- -L, --logID-file=[file path] The path of the file containing the message log IDs. Each line in the file should contain a message log ID. Use this option instead of the --log-ID option to input the log IDs.

messages-view (mv) [options] [object path]

Lists messages associated with a ZENworks managed device, bundle, or policy.

- -S, --severity=[severity [...] Filters on the message severity. Valid values are critical, warning, and info.
- -t, --type=[message type] Filters on the source of message. Valid values are server and client. Filtering on server lists messages generated by the ZENworks server and filtering on client lists messages generated by the ZENworks Agent on that device.
- -D, --date-condition=[date condition] Filters messages based on a date range. Valid values are before, since, and between. Use the --begin-date and --end-date options to specify the dates. If date condition is used and no date is specified, the current date is taken by default.
- -b, --begin-date=[message logged date] The date on which the message was logged. The format for the date is YYYY-MM-DD. This option is to be used in conjunction with the date condition option. If date condition is not specified, messages logged before this date are displayed.
- -e, --end-date=[message logged date] The date on which the message was logged. The format for the date is YYYY-MM-DD. This option is to be specified when between is specified as the value for the date condition option.
- -a, --acknowledged Filters on acknowledged messages.
- -n, --not-acknowledged Filters on messages that are not acknowledged.
- -m, --messagefilter=[localized message] Filters on the localized message.
- -c, --count Displays only the count of the messages.

- -o, --sort-order=[sort order] Sorts the messages based on date, severity, and acknowledged.
- -A, --asc-Specifies the direction of sorted listing. The default is descending order.
- -d, --detailed Returns more information about the messages.
- -s, --scrollsize=[scrollsize] Number of results to be displayed at a time.

Network Environment Commands

These commands are used to view and manage network environments. Network environments consist of services (gateways, DNS servers, DHCP servers, and so forth) that identify the environment.

Network environments are the building blocks for locations. When the ZENworks Agent determines that its current environment matches a network environment assigned to a location, the agent enforces any security policies and closest server rules assigned to the location.

Network environment commands begin with network-environment- in the long form, or with the letters ne in the short form. All of the commands below accept the flags listed in the Global Options section. In addition, they accept individual options as listed with each command.

- "network-environment-audit-upload (neau) (network environment name) (state)" on page 56
- "network-environment-create (nec) (network environment name) [-d|--desc=<description>] [network environment XML file]" on page 57
- * "network-environment-delete (ned) (network environment name) [...]" on page 57
- "network-environment-export-to-file (neetf) (network environment name) (XML file path)" on page 57
- ◆ "network-environment-list (nel) [options]" on page 57
- "network-environment-list-relationships (nelr) (network environment name) [-cr count]" on page 57
- "network-environment-rename (ner) (old name) (new name)" on page 57
- "network-environment-throttle (net) (network environment name) (throttle rate)" on page 58
- "(network-preferred-protocol-communication | neppc) (network environment name) [options]" on page 58

network-environment-audit-upload (neau) (network environment name) (state)

Configures the audit data upload setting for a specified network environment.

(network environment name) - The name of the network environment.

(state) - Select the state:

- 0 to revert to the audit data upload settings configured for the location associated with the device.
- 1 to enable devices in the associated network environment to upload audit event data to any Satellite Server (Collection role) or Primary Server.
- 2 to disable devices in the associated network environment, from uploading audit event data to any Satellite Server (Collection role) or Primary Server.

network-environment-create (nec) (network environment name) [-d]--desc=<description>] [network environment XML file]

Creates a network environment from the information contained in the specified XML file.

(network environment name) - The name you want assigned to the new network environment.

-d, --desc=<description> - A description for the network environment.

[network environment XML file] - The pathname of the XML file containing the information needed to create the network environment. If you don't already have an XML file, use the network-environment-export-to-file command to export the information for an existing network environment. You can then use the XML file as a template for creating new network environment files.

network-environment-delete (ned) (network environment name) [...]

Deletes a network environment.

(network environment name) - The name of the network environment you want to delete. You can specify one or more names.

network-environment-export-to-file (neetf) (network environment name) (XML file path)

Exports a network environment's information to an XML-formatted file.

The network-environment-create command requires network environment information to be input through an XML-formatted file. You can use this file as a template, modifying it as necessary to include the information you want used when creating a new network environment.

(network environment name) - The name of the network environment whose information you want to export to the file.

(XML file path) - The file path and name for the export file.

network-environment-list (nel) [options]

Lists network environments.

Accepts the following options:

- -c, --count Displays the count of the results.
- -s, --scrollsize=[scrollsize] Number of results to be displayed at a time.

network-environment-list-relationships (nelr) (network environment name) [-cr count]

Lists the ZENworks objects such as policies and bundles that are associated with the specified network environment.

(network environment name) - The name of the network environment whose ZENworks objects you want to view.

Accepts the following option:

-c, --count - Displays the count of the results.

network-environment-rename (ner) (old name) (new name)

Renames a network environment.

(old name) - The name of the network environment that you want to rename.

(new name) - The new name for the network environment.

network-environment-throttle (net) (network environment name) (throttle
rate)

Sets the bandwidth throttle rate for distributing content to devices located in a specific network environment. To maximize performance of your ZENworks Servers and network system, high bandwidth environments can use one set of throttle rates and low bandwidth environments can use a different set of throttle rates. The throttle rate can be overridden in a bundle so that high-priority patch and bundle content can be deployed quickly.

(network environment name) - The name of the network environment for which you want to define the bandwidth throttle rate.

(throttle rate) - The maximum bandwidth rate in kilobits per second (kbps).

(network-preferred-protocol-communication | neppc) (network environment name) [options]

Creates a network environment

<network environment name>: Specify a name for the network environment.

Accepts the following options:

IPv4: Specify IPv4 if you want the devices in this network environment to try communicating with the servers using IPv4 URLs first before attempting IPv6 URLs.

IPv6: Specify IPv6 if you want the devices in this network environment to try communicating with the servers using IPv6 URLs first before attempting IPv4 URLs.

Micro Focus Customer Center Registration Command

This command is used to register the Primary Server to the Micro Focus Customer Center.

The Micro Focus Customer Center Registration command begins with ncc-register in the long form, or with nccreg in the short form. This command accepts the flags listed in the Global Options section. In addition, it accepts individual options as listed with the command.

• "(ncc-register|nccreg) (abc@xyz.com) (registration-key) [Primary Server path] [-i|--nccConfigXML=ncc-config.xml] [-r|--reRegister]" on page 58

(ncc-register|nccreg) (abc@xyz.com) (registration-key) [Primary Server
path] [-i|--nccConfigXML=ncc-config.xml] [-r|--reRegister]

Registers the Primary Server to the Micro Focus Customer Center.

(abc@xyz.com) - The Email address to register the Primary Server to the Micro Focus Customer Center Server.

(registration-key) - The Registration key to register the Primary Server to the Micro Focus Customer Center Server.

[Primary Server path] - The path of the Primary Server to register to the Micro Focus Customer Center Server.

-i, --nccConfigXML= ncc-config.xml - The XML file that contains registration information such as the product, version, architecture, and release.

-r, --reRegister - Reregister the Primary Server to the Micro Focus Customer Center Server.

Examples:

To register the Local Primary Server to the Micro Focus Customer Center Server, run the following command:

```
zman nccreg email reg-key
```

To register a specific Primary Server to the Micro Focus Customer Center Server, run the following command:

```
zman nccreg email reg-key server_path
```

To reregister the Local Primary Server to the Micro Focus Customer Center Server, run the following command:

```
zman nccreg email reg-key -r
```

To reregister a specific Primary Server to the Micro Focus Customer Center Server, run the following command:

```
zman nccreg email reg-key server_path -r
```

Mobile Device Commands

These commands are used to manage mobile devices. Mobile device commands begin with mobile- in the long form, or with the letter m in the short form.

- "mobile-group-create (mgc) (group name) [parent folder] [options]" on page 60
- "mobile-move (mmv) (mobile object path) [destination folder path]" on page 60
- "mobile-rename (mr) (mobile object path) (new name)" on page 60
- "mobile-delete (mdl) (mobile object path) [...] [options]" on page 60
- "mobile-group-add (mga) (mobile group path) (mobile path) [...] [options]" on page 60
- "mobile-list (ml) [folder] [options]" on page 61
- "mobile-group-members (mgm) (mobile group path) [options]" on page 61
- "mobile-group-remove (mgr) (mobile group path) (mobile path) [...] [options]" on page 61
- "mobile-list-groups (mlg) (mobile path) [options]" on page 61
- "mobile-add-policy (map) (mobile object path) (policy or policy group) [...] [options]" on page 61
- "mobile-remove-policy (mrp) (mobile object path) (policy or policy group) [...] [options]" on page 62
- "mobile-list-policies (mlp) (mobile object path) [options]" on page 62
- "mobile-reorder-policies (mrop) (mobile object path) (current position) (new position)" on page 62

- "mobile-view-all-policies-status (mvaps) (mobile path) [options]" on page 62
- "mobile-set-as-test (msat) (mobile object path)" on page 62
- "mobile-set-as-nontest (msan) (mobile object path)" on page 63
- "mobile-refresh (mrf) (mobile object path) [...] [options]" on page 63
- "mobile-activationlockbypass-export-to-file (malbetf) [file-name]" on page 63
- ◆ "mobile-frpaccount-export-to-file | mfetf (ZIP file path)" on page 63
- "mobile-frpaccount-purge-records|mfpr" on page 63

mobile-group-create (mgc) (group name) [parent folder] [options]

Creates a mobile group and adds members to it.

Accepts the following options:

- --desc=[description] Description for the group.
- -m, --members=[mobile path][...] The path of the mobile devices relative to /Devices/ Mobile Devices.
- -f, --folder=[mobile folder] The path of a mobile device folder relative to /Devices/Mobile Devices. If this option is specified, the path of the mobile device objects is determined relative to this folder. This can be used to specify multiple mobile device objects under the same folder.
- mobile-move (mmv) (mobile object path) [destination folder path]

 Moves a mobile device object to a different folder.

```
mobile-rename (mr) (mobile object path) (new name)
```

Renames a mobile device object.

```
mobile-delete (mdl) (mobile object path) [...] [options]
```

Deletes one or more mobile device objects.

(mobile object path) [...] - The path of the mobile device objects (mobile device, mobile device folder or mobile device group) relative to /Devices/Mobile Devices. The wildcard * can be used in the object names if it is enclosed in quotations. Exercise caution while using wildcards for deleting objects.

Accepts the following options:

- -r, --recursive Deletes objects inside a folder recursively.
- -f, --folder=[mobile folder] The path of a mobile device folder relative to /Devices/Mobile Devices. If this option is specified, the path of the mobile device objects is determined relative to this folder. This can be used to specify multiple mobile device objects under the same folder.
- mobile-group-add (mga) (mobile group path) (mobile path) [...] [options]

 Adds mobile devices to a mobile device group.

Accepts the following option:

-f, --folder=[mobile folder] - The path of a mobile device folder relative to /Devices/Mobile Devices. If this option is specified, the path of the mobile device objects is determined relative to this folder. This can be used to specify multiple mobile device objects under the same folder.

mobile-list (ml) [folder] [options]

Lists mobile device objects.

Accepts the following options:

- -r, --recursive Lists results recursively including subfolders. If this option is not specified, the contents of the subfolders are not listed.
- -n, --namefilter=[filter string] Displays results matching the specified name. The wildcards * and ? can be used if they are enclosed in quotation marks.
- -t, --typefilter=[type filter][...] Displays results matching the comma-separated list of object types specified. Valid values are device, group, and folder.
- -c, --count Displays the count of the results.
- -s, --scrollsize=[scrollsize] Number of results to be displayed at a time.
- -f, --flagfilter=[flag filter][...] Displays results matching the comma-separated list of flags specified. Valid values are retired, notretired, test, and non-test.

mobile-group-members (mgm) (mobile group path) [options]

Lists members of a mobile device group or a dynamic mobile device group.

Accepts the following option:

-s, --scrollsize=[scrollsize] - Number of results to be displayed at a time.

```
mobile-group-remove (mgr) (mobile group path) (mobile path) [...] [options]
```

Removes mobile devices from a mobile device group.

Accepts the following option:

-f, --folder=[mobile folder] - The path of a mobile device folder relative to /Devices/Mobile Devices. If this option is specified, the path of the mobile device objects is determined relative to this folder. This can be used to specify multiple mobile device objects under the same folder.

```
mobile-list-groups (mlg) (mobile path) [options]
```

Lists groups of which the given mobile device is a member.

Accepts the following option:

-s, --scrollsize=[scrollsize] - Number of results to be displayed at a time.

mobile-add-policy (map) (mobile object path) (policy or policy group) [...] [options]

Assigns policies to a mobile device object.

Accepts the following options:

- -c, --conflicts=[policy conflict resolution order] Determines how policy conflicts are resolved. Valid values are userlast or 1, devicelast or 2, deviceonly or 3, useronly or 4. For userlast, device-associated policies are applied first, followed by user-associated policies. For devicelast, user-associated policies are applied first, followed by device-associated policies. For deviceonly, user-associated policies are ignored. For useronly, device-associated policies are ignored. If this option is not specified, userlast is taken as the default value.
- -e, --enforce-now Enforces the policy immediately on all assigned devices.
- -f, --folder=[policy folder] The path of a policy folder relative to /Policies. If this option is specified, the path of the policy objects is determined relative to this folder. This can be used to specify multiple policy objects under the same folder.

mobile-remove-policy (mrp) (mobile object path) (policy or policy group) [...] [options]

Removes policies assigned to a mobile device object.

Accepts the following option:

-f, --folder=[policy folder] - The path of a policy folder relative to /Policies. If this option is specified, the path of the policy objects is determined relative to this folder. This can be used to specify multiple policy objects under the same folder.

mobile-list-policies (mlp) (mobile object path) [options]

Lists policies assigned to a mobile device object.

Accepts the following options:

- -a, --all Lists both effective and non-effective policies.
- -e, --effective Lists only effective policies.
- -s, --scrollsize=[scrollsize] Number of results to be displayed at a time.

mobile-reorder-policies (mrop) (mobile object path) (current position) (new position)

Changes the order of policies assigned to a mobile device. Use the mobile-list-policies command to get the order of assigned policies.

mobile-view-all-policies-status (mvaps) (mobile path) [options]

Displays the advanced deployment status of policies assigned to a mobile.

Accepts the following options:

- --statusfilter=[status type][...] Filters on the status of Policy Apply Event. Valid values are S, F, and P (Success, Failure, and Pending). A comma-separated list of status types can be given.
- -s, --scrollsize=[scrollsize] Number of results to be displayed at a time.

mobile-set-as-test (msat) (mobile object path)

Sets a mobile device as a test device.

Example:

To set mobiledevice1 as a test device:

zman msat mobiledevice1

mobile-set-as-nontest (msan) (mobile object path)

Sets a mobile device as a non-test device.

Example:

To set mobiledevice1 as a non-test device:

zman msan mobiledevice1

mobile-refresh (mrf) (mobile object path) [...] [options]

Refreshes the mobile devices.

Accepts the following options:

- -f, --folder=[mobile folder] The path of a mobile device folder relative to /Devices/Mobile Devices. If this option is specified, the path of the mobile device objects is determined relative to this folder. This can be used to specify multiple mobile devices under the same folder.
- --notify=<minutes> Time in minutes to notify all devices.
- --expire=<minutes> Time in minutes for expiry after creation of the quick task. Specify 0 to expire immediately.
- --expirenever The quick task never expires in the Primary Server.

mobile-activationlockbypass-export-to-file (malbetf) [file-name]

Exports the activation lock bypass codes of all supervised iOS devices in the zone to a ZIP file.

[file-name] Specify a file name for the ZIP file in which the bypass codes should be saved. This is an optional field.

After executing the command, you will be prompted for a password.

The ZIP file will be saved in the current command prompt directory.

Only super admins have rights to execute the command.

Example: malbetf lock_code

In this example, the generated ZIP file will be saved with the name **lock_code**. The file name is an optional field. After executing the command, you will be prompted for the password.

mobile-frpaccount-export-to-file | mfetf (ZIP file path)

Exports the Factory Reset Protection (FRP) details, which is the corporate account details of users who are authorized to provision devices after a hard factory reset, to CSV files and consolidates these files to create a ZIP archive file.

(ZIP file path) Specify the complete path where the ZIP archive that contains the CSV files, should be saved.

Example:

```
zman mfetf C:\frpbackup\frpaccounts.zip
```

Exports the CSV files containing FRP details and create a ZIP archive file named frpaccounts.zip in the path C:\frpbackup.

mobile-frpaccount-purge-records | mfpr

Purges Factory Reset Protection (FRP) details of all the deleted devices from the ZENworks database.

Object Commands

These are utility or convenience commands to operate on ZENworks objects. Object commands begin with object—in the long form, or with the letter o in the short form.

All of the commands below accept the option flags listed in the Global Options section. In addition, they accept individual options as listed with each command.

```
    "object-get-GUID (ogg) (object path)" on page 64
    "object-get-name (ogn) (ZENworks GUID)" on page 64
    "object-get-path (ogp) (ZENworks GUID)" on page 64
    object-get-GUID (ogg) (object path)
        Gets the GUID of a ZENworks object.
        (object path) - Full path of the ZENworks object, starting with a forward slash (/).
    object-get-name (ogn) (ZENworks GUID)
        Gets the name of a ZENworks object.
        (ZENworks GUID) - The ZENworks GUID of the object, consisting of 32 characters.
    object-get-path (ogp) (ZENworks GUID)
        Gets the path of a ZENworks object, given the GUID.
        (ZENworks GUID) - The ZENworks GUID of the object, consisting of 32 characters.
```

Primary Server Commands

These commands are used to manage content on the Primary Server. Primary Server commands begin with primary-server-.

- "primary-server-replicate-content (psrc) (bundle path | policy path)" on page 64
- "primary-server-cleanup-content (pscc) (bundle) (bundle path | policy path)" on page 64

primary-server-replicate-content (psrc) (bundle path | policy path)

Replicates the content for the specified bundle or policy on the Primary Server. Examples:

To replicate the content of a bundle to the current server: zman psrc /Bundle/bundle1

To replicate the content of a policy to the current server: zman psrc /Policy/policy1

primary-server-cleanup-content (pscc) (bundle) (bundle path | policy path)

Cleans up the content for the specified bundle/policy on the Primary Server.

Examples:

To clean up the content of a bundle from the current server: zman pscc /Bundle/bundle1

To clean up the content of a policy from the current server: zman pscc /Policy/policy1

Policy Commands

These commands are used to create, modify and manage policies. Policy commands begin with policy—in the long form, or with the letter p in the short form.

All of the commands below accept the option flags listed in the Global Options section. In addition, they accept individual options as listed with each command.

- "policy-assign (pa) (device or user type) (policy or policy group) (device or user object path) [...] [options]" on page 66
- "policy-create (pc) (policy name) (policy XML file) [parent folder] [options]" on page 66
- "policy-copy (pcp) (policy path) (policy name) [parent folder] [options]" on page 67
- "policy-delete (pd) (policy object path) [...] [options]" on page 67
- "policy-disable (pdl) (policy path) [...] [options]" on page 67
- "policy-delete-version (pdv) (policy path) [version of the policy to be deleted] [options]" on page 67
- "policy-enable (pel) (policy path) [...] [options]" on page 67
- "policy-export-to-file (petf) (policy path) (XML file path) [version of the policy] [-c|--export-content]" on page 68
- "policy-folder-create (pfc) (folder name) [parent folder] [options]" on page 68
- "policy-group-add (pga) (policy group path) (policy path) [...] [options]" on page 68
- "policy-group-create (pgc) (group name) [parent folder] [options]" on page 68
- "policy-group-members (pgm) (policy group path) [options]" on page 69
- "policy-group-remove (pgr) (policy group path) (policy path) [...] [options]" on page 69
- "policy-list (pl) [options] [folder]" on page 69
- "policy-list-assignments (plas) (policy or policy group) [options]" on page 69
- "policy-list-groups (plg) (policy path) [options]" on page 69
- ◆ "policy-list-version (plv) (policy path)" on page 69
- "policy-move (pmv) (policy object path) [destination folder path]" on page 70
- "policy-sandbox-create (psc) (policy path) [version of the policy] [options]" on page 70
- "policy-sandbox-publish (psp) (policy path)" on page 70
- "policy-sandbox-publish-to-newpolicy (psptn) (policy path) (policy name) [parent folder] [options]" on page 70
- "policy-sandbox-revert (psr) (policy path)" on page 71

- "policy-rename (pr) (policy object path) (new name) [options]" on page 71
- "policy-unassign (pua) (device or user type) (policy or policy group) (device or user object path) [...] [options]" on page 71
- "policy-view-advanced-deployment-status (pvads) (policy path) [options]" on page 71
- "policy-view-summary-totals (pvst) (policy path) [options]" on page 72

policy-assign (pa) (device or user type) (policy or policy group) (device or user object path) [...] [options]

Assigns a policy or policy group to one or more device or user objects.

(device or user type) - Valid values are device, server, workstation, and user.

(device or user object path) [...] - The path of the device or user objects relative to the root folder of the device or user type specified.

Accepts the following options:

- -c, --conflicts=[policy conflict resolution order] Determine how policy conflicts are resolved. Valid values are userlast or 1, devicelast or 2, deviceonly or 3, useronly or 4. For userlast, device-associated policies are applied first followed by user-associated policies. For devicelast, user-associated policies are applied first followed by device-associated policies. For deviceonly, user-associated policies are ignored. For useronly, device-associated policies are ignored. If this option is not specified, userlast is taken as the default value.
- -e, --enforce-now Enforces the policy immediately on all assigned devices.
- -f, --folder=[device or user folder] The path of the device or user folder relative to the respective root folder. If this option is specified, the path of the device or user objects is determined relative to this folder. This can be used to specify multiple device or user objects under the same folder.

policy-create (pc) (policy name) (policy XML file) [parent folder] [options]

Creates a policy.

(policy XML file) - XML file containing exported policy information. Use policy-export-to-file (petf) to export a policy's information into a XML file. If you want to reuse files, template XML files can be created from policies created through ZENworks Control Center.

Accepts the following options:

- -d, --desc=[description] Description for the policy.
- -a, --actioninfo=[file content for policy] XML file containing information about file content to be associated and packaged with the policy. For example, the driver file to be installed for a Printer policy is the file content. For the XML format template, refer to ActionInfo.xml located in /opt/novell/zenworks/share/zman/samples/policies on a Linux server or Installation_directory:\Novell\Zenworks\share\zman\ samples\policies on a Windows server.

- -s, --create-as-sandbox=[create as sandbox] Creates the policy as a sandbox.
- -n, --create-with-new-grid Creates the policy object with the new GUID. If the option is not specified, it will validate the policy objects for imported GUID in the policy XML file. If the imported GUID does not exist, a new GUID will be created, else the imported GUID will be retained.

```
policy-copy (pcp) (policy path) (policy name) [parent folder] [options]
   Copies a policy.
```

Accepts the following option:

-d, --desc=[description] - Description for the policy.

policy-delete (pd) (policy object path) [...] [options]

Deletes one or more policy objects.

(policy object path) [...] - The path of the policy objects (policy, policy folder or policy group) relative to /Policies. The wildcard * can be used in the object names if it is enclosed in quotations. Exercise caution while using wildcards for deleting objects.

Accepts the following options:

- -r, --recursive Deletes objects inside a folder recursively.
- -f, --folder=[policy folder] The path of a policy folder relative to /Policies. If this option is specified, the path of the policy objects is determined relative to this folder. This can be used to specify multiple policy objects under the same folder.

```
policy-disable (pdl) (policy path) [...] [options]
```

Disables policies.

Accepts the following option:

-f, --folder=[policy folder] - The path of a policy folder relative to /Policies. If this option is specified, the path of the policy objects is determined relative to this folder. This can be used to specify multiple policy objects under the same folder.

```
policy-delete-version (pdv) (policy path) [version of the policy to be deleted] [options]
```

Deletes one or more versions of the policy.

Examples:

To delete the version 3 of the policy, zenpolicy:

```
zman pdv zenpolicy 3
```

To delete all the versions of the policy, zenpolicy:

```
zman pdv zenpolicy -a
```

To delete all the versions of the policy, zenpolicy, that are older than the specified version:

```
zman pdv zenpolicy version -p
```

```
policy-enable (pel) (policy path) [...] [options]
```

Enables policies.

Accepts the following option:

-f, --folder=[policy folder] - The path of a policy folder relative to /Policies. If this option is specified, the path of the policy objects is determined relative to this folder. This can be used to specify multiple policy objects under the same folder.

```
policy-export-to-file (petf) (policy path) (XML file path) [version of the policy] [-c|--export-content]
```

Exports a policy's information (in XML format) to a file. The XML file is to be used as input for creating policies.

(XML file path) - The complete path of the XML file to which the policy information is to be exported.

[Version of the policy] - Version of the policy to be exported. If the version is not specified, the published version of the policy is exported. To export a sandbox version of the policy, specify sandbox.

[-c|--export-content] - Exports the content of the policy to a subdirectory within the directory containing the XML file to which the policy's information is exported. If the option is not specified, the policy content is not exported.

Examples:

To export the sandbox version of a policy named zenpolicy to an XML file named policy.xml:

zman petf policyfolder/zenpolicy C:\policies\policy.xml sandbox

To export version 3 of a policy named zenpolicy to an XML file named policy.xml:

zman petf policyfolder/zenpolicy C:\policies\policy.xml 3

To export version 5 of a policy named zenpolicy to an XML file named policy.xml and export the policy's content to the C:\policies\:

zman petf policyfolder/zenpolicy C:\policies\policy.xml 5 -c

NOTE: When you use the generated XML file to enable iOS Intune App Protection policy creation in another zone, you need to replace the tenant ID in the generated XML with the tenant ID of the new zone.

policy-folder-create (pfc) (folder name) [parent folder] [options]

Creates a new folder for containing policies.

Accepts the following option:

--desc=[description] - Description for the folder.

policy-group-add (pga) (policy group path) (policy path) [...] [options]

Adds policies to a policy group.

Accepts the following option:

-f, --folder=[policy folder] - The path of a policy folder relative to /Policies. If this option is specified, the path of the policy objects is determined relative to this folder. This can be used to specify multiple policy objects under the same folder.

policy-group-create (pgc) (group name) [parent folder] [options]

Creates a policy group and adds members to it.

Accepts the following options:

- --desc=[description] Description for the group.
- -m, --members=[policy path][...] The path of the policies relative to /Policies.
- -f, --folder=[policy folder] The path of a policy folder relative to /Policies. If this option is specified, the path of the policy objects is determined relative to this folder. This can be used to specify multiple policy objects under the same folder.

policy-group-members (pgm) (policy group path) [options]

Lists members of a policy group.

Accepts the following option:

-s, --scrollsize=[scrollsize] - Number of results to be displayed at a time.

policy-group-remove (pgr) (policy group path) (policy path) [...] [options]

Removes policies from a policy group.

Accepts the following option:

-f, --folder=[policy folder] - The path of a policy folder relative to /Policies. If this option is specified, the path of the policy objects is determined relative to this folder. This can be used to specify multiple policy objects under the same folder.

policy-list (pl) [options] [folder]

Lists policy objects.

Accepts the following options:

- -r, --recursive Lists results recursively including subfolders. If this option is not specified, the contents of the subfolders are not listed.
- -n, --namefilter=[filter string] Displays results matching the specified name. The wildcards * and ? can be used if they are enclosed in quotation marks.
- -c, --count Displays the count of the results.
- -s, --scrollsize=[scrollsize] Number of results to be displayed at a time.

policy-list-assignments (plas) (policy or policy group) [options]

Lists the device and user assignments for a policy.

Accepts the following options:

- -t, --typefilter=[assignment type] Filters on the assignment type. Valid values are device and user.
- -s, --scrollsize=[scrollsize] Number of results to be displayed at a time.

policy-list-groups (plg) (policy path) [options]

Lists groups where the given policy is a member.

Accepts the following option:

-s, --scrollsize=[scrollsize] - Number of results to be displayed at a time.

policy-list-version (plv) (policy path)

Lists all the versions of the policy.

Examples:

To list all the versions of the policy, zenpolicy:

```
zman plv zenpolicy
```

policy-move (pmv) (policy object path) [destination folder path]

Moves a policy object to a different folder.

policy-sandbox-create (psc) (policy path) [version of the policy] [options]

Create a sandbox from an existing version of a policy

[version of the policy] - Specify the version of the policy to be used for creating the sandbox.

Accepts the following option:

-f, --force =[force] - Overwrite any existing sandbox.

Example:

To create a sandbox from the version 2 of a policy, zenpolicy:

```
zman psc zenpolicy 2
```

policy-sandbox-publish (psp) (policy path)

Publish a sandbox to create a published version of the policy.

Example:

To publish the sandbox of a policy, zenpolicy

```
zman psp zenpolicy
```

policy-sandbox-publish-to-newpolicy (psptn) (policy path) (policy name) [parent folder] [options]

Publishes sandbox version of a policy to a new policy.

(policy path) - The path of the policy object relative to the policies root folder, /Policies.

(policy name) - Name of the new policy to be created.

[parent folder] - Folder in which the new policy is to be created. If not specified, the policy is created in the root folder.

Accepts the following options:

- -s, --createAsSandbox =[create as sandbox] Creates the policy as a sandbox.
- -g, --groups Adds the newly created policy to all the groups which the source policy is a member of.
- -d, --deviceAssignments Copies all the device assignments from the source policy to the new policy created.
- -u, --userAssignments Copies all the user assignments from the source policy to the new policy created.

Example:

To publish the sandbox version of a policy to a new policy.

```
zman psptn policy1 policy2 /Policies/Folder1
```

policy-sandbox-revert (psr) (policy path)

Deletes the sandbox and reverts to the latest published version of the policy.

Example:

To delete the sandbox and revert to the latest published version of the policy:

zman psr zenpolicy

policy-rename (pr) (policy object path) (new name) [options]

Renames a policy object.

-p, --publish =[publish] - If this option is specified and the display name of the bundle is edited, the bundle is immediately published. However, if the current display name of the bundle is different from the existing bundle name or if a sandbox already exists for the bundle, specifying this option will have no effect.

policy-unassign (pua) (device or user type) (policy or policy group) (device or user object path) [...] [options]

Unassigns a policy or policy group from one or more device or user objects.

(device or user type) - Valid values are device, server, workstation, and user.

(device or user object path) [...] - The path of the device or user objects relative to the root folder of the device or user type specified.

Accepts the following option:

-f, --folder=[device or user folder] - The path of the device or user folder relative to the respective root folder. If this option is specified, the path of the device or user objects is determined relative to this folder. This can be used to specify multiple device or user objects under the same folder.

policy-view-advanced-deployment-status (pvads) (policy path) [options]

Displays the advanced deployment status of a policy.

Accepts the following options:

- -d, --device=[device path] Displays the deployment status only for the specified device. The path of the device is relative to /Devices.
- -u, --user=[user path] Displays the deployment status for the specified user only. The path of the user is relative to /Users. If device is also specified, status details for the specified user logged into the specified device are displayed.
- -n, --namefilter=[target device name] Filters on the name of the device. Displays options matching the specified filter. The wildcard * and ? can be used if they are enclosed in quotation marks.
- --statusfilter=[status type][...] Filters on the status of Policy Apply Event. Valid values are S, F, and P (Success, Failure and Pending). A comma-separated list of status types can be given.
- -t, --typefilter=[target device or user type][...] Filters on the type of the target. Valid values are server, workstation, and user. A comma-separated list of target types can be given.
- -s, --scrollsize=[scrollsize] Number of results to be displayed at a time.
- -v, --version [value]

Following are the valid values:

published: Use this option to display number of non-test devices on which the policy is deployed.

sandbox: Use this option to display the number of test device on which the sandbox version of the policy is deployed.

[version-of-the-object]: Use a version number to get the status of the related policy version.

The default value is published.

-c, --status-calculation [value]

Following are the valid values:

consolidated: Use this option to display the total number of devices on which this policy is deployed.

version: Use this option to display the status of specific version.

The default value is version.

```
policy-view-summary-totals (pvst) (policy path) [options]
```

Displays a summary of the deployment status of a particular policy.

Accepts the following options:

```
-v, --version [value]
```

Following are the valid values:

- **published:** Use this option to display number of non-test devices on which the policy is deployed.
- sandbox: Use this option to display the number of test device on which the sandbox version of the policy is deployed.
- [version-of-the-object]: Use a version number to get the status of the related policy version.

The default value is published.

- -c, --status-calculation [value]
 - consolidated: Use this option to display the total number of devices on which this policy is deployed.
 - **version:** Use this option to display the status of specific version.

The default value is version.

Policy Settings Commands

These commands are used to set and modify policy settings. Settings commands begin with settings – in the long form, or with the letter s in the short form.

All of the commands below accept the option flags listed in the Global Options section. In addition, they accept individual options as listed with each command.

- "policy-settings-copy (pscp) (policy source path) (destination policy or policy folder path) [...] [options]" on page 73
- "policy-settings-export-to-file (psetf) (XML file path) [settings name] [options] [...]" on page 73

- "policy-settings-revert (psrt) (policy source path) (settings name) [...]" on page 73
- "policy-settings-set (pss) [options] (XML file path) [destination policy or policy folder path] [...]" on page 73

policy-settings-copy (pscp) (policy source path) (destination policy or policy folder path) [...] [options]

Copies settings.

(source policy or policy folder path) - The path of the policy or policy folder relative to / Policies from which settings have to be copied.

(destination policy or policy folder path) [...] - The path of the policies or policy folders relative to /Policies to which settings must be copied.

Accepts the following option:

-n, --names=[settings name][...] - Names of the settings to be copied from the source path. If this option is not specified, all settings defined at the source path are copied.

policy-settings-export-to-file (psetf) (XML file path) [settings name] [options] [...]

Exports settings data (in XML format) to a file. The XML file is to be used as input for creating or modifying settings.

(XML file path) - The file into which the settings data is stored in XML format. If the file does not exist, a new file is created.

[settings name] [...] - Names of the settings to be exported. If this option is not specified, all settings are exported.

Accepts the following options:

- -s, --source=[source policy or policy folder path] The path of the policy or policy folder relative to /Policies from which settings must be exported. If this option is not specified, settings are exported from the Zone.
- -e, --effective If specified, the effective settings are retrieved; otherwise, only the settings defined or overridden at the source path are retrieved.

policy-settings-revert (psrt) (policy source path) (settings name) [...]

Reverts the settings to that of the parent folder.

(source policy or policy folder path) - The path of the policy or policy folder relative to / Policies, whose settings must be reverted.

policy-settings-set (pss) [options] (XML file path) [destination policy or policy folder path] [...]

Sets settings at various levels.

(XML file path) - XML file containing exported settings information. Use settings-export-to-file (setf) to export settings information into a XML file.

Accepts the following options:

[settings name] [...] - Names of the settings to be exported. If this option is not specified, all settings are exported.

- -f, --force Forces all children (subfolders and individual polices) to inherit these settings.
- -s, --source=[source policy or policy folder path] The path of the policy or policy folder relative to /Policies for which settings have to be set. If this option is not specified, settings are set at the Zone level.

Query Commands

These commands are used to list and run saved searches. Query commands begin with query-in the long form, or with the letter q in the short form.

- "query-list-savedsearches|qls [-d|--detailed]" on page 74
- "query-run-savedsearch|qrs (saved search) [folder path] [-r|--recursive] [-s|--scrollsize=scroll size]" on page 74

```
query-list-savedsearches|qls [-d|--detailed]
```

Lists the saved searches.

Accepts the following option:

[-d, --detailed] - Lists the filter criteria for the saved search.

```
query-run-savedsearch|qrs (saved search) [folder path] [-r|--recursive] [-s|--scrollsize=scroll size]
```

Runs a saved search.

Accepts the following options:

(saved search) - Saved search to be executed.

[folder path] - The path of the device folder where the search is to be performed relative to / Devices. The default folder is /Devices.

[-r, --recursive] - This option has been deprecated in ZENworks 11 SP3. If you specify this option, it will be ignored. The recursive value is taken from the saved search.

[-s, --scrollsize=scroll size] - Number of results to be displayed at a time.

Queue Commands

These commands are used when you need to make modifications to the queue. The queue processes asynchronous events such as client refreshes and content cleanup, and does not need to be modified under most circumstances. Queue commands begin with queue- in the long form, or with the letter q in the short form.

All of the commands below accept the option flags listed in the Global Options section. In addition, they accept individual options as listed with each command.

```
• "queue-flush (qf) (queue status)" on page 74
```

- "queue-list (ql) [server path] [options]" on page 75
- "queue-reset (qr) [server path]" on page 75

```
queue-flush (qf) (queue status)
```

Flushes the queue by removing the queue entries.

(queue status) [...] - Filters on the status of the queue entries. Valid values are N, I, C, S, and F (New, In Progress, Cancelled, Success, and Failed).

queue-list (ql) [server path] [options]

Lists queue entries.

[server path] - The path of a server relative to /Devices/Servers. Lists only the queue entries belonging to the specified server.

Accepts the following options:

- -t, --type=[queue action type] Filters on the type of the queue entry. For example, content.cleanup is a queue entry type.
- -s, --status=[queue status] Filters on the status of the queue entries. Valid values are N, I, C, S, and F (New, In Progress, Canceled, Success, and Failed).

```
queue-reset (qr) [server path]
```

Resets the queue, and sets the status of failed queue entries to New.

[server path] - The path of a server relative to /Devices/Servers. Resets only the queue entries belonging to the specified server.

Registration Commands

These commands allow you to create and alter registrations. They require a device type to be specified. It determines the type of device folder and device group the registration key is associated with and therefore the type of the registering devices. Registration commands begin with registration—in the long form, or with the letter r in the short form.

All of the commands below accept the option flags listed in the Global Options section. In addition, they accept individual options as listed with each command.

- "registration-add-device-groups (radg) (device type) (registration key) (device group path) [...] [options]" on page 76
- "registration-create-key (rck) (device type) (registration key) [registration folder path] [options]" on page 76
- "registration-copy (rcp) (registration key) (new name)" on page 76
- "registration-delete (rd) (registration object path) [...] [options]" on page 76
- "registration-folder-create (rfc) (folder name) [parent folder] [options]" on page 77
- "registration-info (ri) (registratin key)" on page 77
- "registration-list (rl) [options] [folder]" on page 77
- "registration-list-device-groups (rldg) (registration key)(rd)" on page 77
- "registration-move (rmv) (registration object path) [destination folder path]" on page 77
- * "registration-remove-device-groups (rrdg) (device type)
 (registration key) (device group path) [...] [options]" on page 77
- "registration-rename (rr) (registration object path) (new name)" on page 77

- "registration-update-key (ruk) (device type) (registration key) [options]" on page 77
- "registration-import-devices (rid) (CSV file path) (registration key)" on page 78

registration-add-device-groups (radg) (device type) (registration key) (device group path) [...] [options]

Adds membership in the specified device groups for devices registering with the given key. (device type) - Type of the registering device. Valid values are server and workstation. Accepts the following option:

-f, --folder=[device folder] - The path of the device folder relative to root folder of the device type specified. If this option is specified, path of the device objects is determined relative to this folder. This can be used to specify multiple device objects under the same folder.

registration-create-key (rck) (device type) (registration key) [registration folder path] [options]

Creates a new registration key.

(device type) - Type of the registering device. Valid values are server and workstation. Accepts the following options:

- -f, --devicefolder=[device folder] The path of the device folder relative to the root folder of the device type specified. Registering devices are placed in this folder.
- -g, --devicegroup=[device group path][...] A comma-separated list of path of the device groups.

 The paths specified should be relative to the root folder of the device type specified.

 Registering devices become members of these device groups.
- --desc=[description] Description for the registration key.
- --site=[site] The site where the devices are located. Registering devices are populated with this site information.
- --dept=[department] The department in which the devices are used. Registering devices are populated with this department information.
- --loc=[location] The physical location of the devices. Registering devices are populated with this location information.
- --limit=[limit] Number of times this key can be used to register devices.

registration-copy (rcp) (registration key) (new name)

Copies a registration key.

(registration key) - Name of the registration key.

(new name) - Name for the copied registration key.

registration-delete (rd) (registration object path) [...] [options]

Deletes registration objects.

(registration object path) [...] - The path of the registration objects (registration key or folder) relative to /Keys. The wildcard * can be used in the object names if it is enclosed in quotations. Exercise caution while using wildcards for deleting objects.

- -r, --recursive Deletes objects inside a folder recursively.
- -f, --folder=[registration folder] The path of a registration folder relative to /Keys. If this option is specified, the path of the registration objects is determined relative to this folder. This can be used to specify multiple registration objects under the same folder.

registration-folder-create (rfc) (folder name) [parent folder] [options]

Creates a new registration folder.

Accepts the following option:

--desc=[description] - Description for the folder.

registration-info (ri) (registratin key)

Displays detailed information about a registration key.

registration-list (rl) [options] [folder]

Lists all registration objects.

Accepts the following options:

- -r, --recursive Lists results recursively, including subfolders. If this option is not specified, the contents of the subfolders are not listed.
- -n, --namefilter=[filter string] Displays results matching the specified name. The wildcards * and ? can be used if they are enclosed in quotation marks.
- -s, --scrollsize=[scrollsize] Number of results to be displayed at a time.

registration-list-device-groups (rldg) (registration key)(rd)

Lists the device groups associated with a registration key.

registration-move (rmv) (registration object path) [destination folder path]

Moves a registration object to a different registration folder.

registration-remove-device-groups (rrdg) (device type) (registration key) (device group path) [...] [options]

Removes the association of device groups to a registration key.

(device type) - Type of the registering device. Valid values are server and workstation.

Accepts the following option:

-f, --folder=[device folder] - The path of the device folder relative to the root folder of the device type specified. If this option is specified, the path of the device objects is determined relative to this folder. This can be used to specify multiple device objects under the same folder.

registration-rename (rr) (registration object path) (new name)

Renames a registration object.

registration-update-key (ruk) (device type) (registration key) [options]

Updates a registration key.

Accepts the following options:

-f, --devicefolder=[device folder] - The path of the device folder relative to the root folder of the device type specified. Registering devices are placed in this folder.

- --desc=[description] Description for the registration key.
- --site=[site] The site where the devices are located. Registering devices are populated with this site information.
- --dept=[department] The department in which the devices are used. Registering devices are populated with this department information.
- --loc=[location] The physical location of the devices. Registering devices are populated with this location information.
- --limit=[limit] Number of times this key can be used to register devices.
- --unlimited The key can be used without limit to register devices.

registration-import-devices (rid) (CSV file path) (registration key)

Imports the devices from the CSV file, which is used to specify the device information.

(CSV file path) - The name of the CSV file with the path. Each entry in the file contains details for a workstation or a server.

For a workstation, or a server, the format of the file entry is version, host name, serial number, and macAddress.

For a workstation, or a server, the version is WS 1.0.

The values for version and host name are mandatory, and the values for serial number and macAddress are optional.

(registration key) - Name of the registration key.

NOTE: Ensure that the file is in UTF-8 format.

For example:

To register the devices in the CSV devicesInfo file by using the registration key regkey, run the zman rid c:\devicesInfo.csv regkey command.

Role Commands

These commands are used to create and manage roles for rights-based management of administrator accounts. Role commands begin with role- in the long form or the letters rl in the short form.

- "role-add-admins (rlaa) [role name] [ZENworks administrator name] [...] [rights category] [object path] [...] [options]" on page 79
- "role-create (rlc) (role name)" on page 79
- "role-delete (rld) (role name) [...]" on page 79
- "role-list (rll) [options]" on page 79
- "role-list-admins (rlla) [role name]" on page 79
- "role-remove-admins (rlra) (role name) (ZENworks administrator name) [...] [rights category] [object path] [...] [options]" on page 79
- "role-rename (rlr) (role name) (new name)" on page 80
- "role-rights-delete (rlrd) (role name) [rights category]" on page 80

- ◆ "role-rights-info (rlri) (role name) [options]" on page 80
- "role-rights-set (rlrs) [role name] [rights category] [options]" on page 80

role-add-admins (rlaa) [role name] [ZENworks administrator name] [...] [rights category] [object path] [...] [options]

Assigns a role to one or more ZENworks administrators and associates the rights categories in a role to different object contexts.

[rights category] - Name of the category within which the rights are grouped. To see the list of categories, run zman role-rights-add-admins --help | more.

[object path] [...] - Full path of the ZENworks object starting with a slash (/) on which the rights grouped in a rights category should be enforced. To view the root folders of the object types that can be associated with a rights category, run zman role-add-admins --help | more.

Accepts the following options:

- -f, --folder=[folder name] Full path of a folder. If this option is specified, the path of the objects is determined relative to this folder. This provides convenience if you want to specify multiple objects under the same folder.
- -H, --help Displays detailed help about the categories of rights available, and the root folders of the object types on which the rights can be enforced.

role-create (rlc) (role name)

Creates a ZENworks administrator role.

role-delete (rld) (role name) [...]

Renames a ZENworks administrator role.

(role name) [...] - Name of the roles. The wildcard * can be used in the object names if it is enclosed in quotation marks. Exercise caution when using wildcards to delete objects.

role-list (rll) [options]

Lists all ZENworks administrator roles.

Accepts the following options:

- -n, --namefilter=[filter string] Displays results matching the specified name. The wildcards * and ? can be used if they are enclosed in quotation marks.
- -N, --name-only Displays the role name only.
- -T, --name-and-type Displays the role name and privilege types only.
- -l, --longnames Displays names of the rights. By default, the abbreviated form of the rights name is displayed.

role-list-admins (rlla) [role name]

Lists the ZENworks administrators with the specified role, and the contexts associated with the rights categories of that role.

```
role-remove-admins (rlra) (role name) (ZENworks administrator name) [...] [rights category] [object path] [...] [options]
```

Removes assignment of a role from one or more ZENworks administrators or removes the association of rights categories to object contexts.

[rights category] - Name of the category within which the rights are grouped. To see the list of categories, run zman role-rights-add-admins --help | more.

[object path] [...] - Full path of the ZENworks object starting with / on which the rights grouped in a rights category should be enforced. To view the root folders of the object types that can be associated with a rights category, run zman role-add-admins --help | more.

Accepts the following option:

-f, --folder=[folder name] - Full path of a folder. If this option is specified, the path of the objects is determined relative to this folder. This provides convenience if you want to specify multiple objects under the same folder.

role-rename (rlr) (role name) (new name)

Renames a ZENworks administrator role.

role-rights-delete (rlrd) (role name) [rights category]

Deletes rights assigned to a ZENworks administrator role.

[rights category] - Name of the category within which the rights are grouped. To see the list of categories, run zman role-rights-set --help | more.

role-rights-info (rlri) (role name) [options]

Displays rights assigned to a ZENworks administrator role.

Accepts the following options:

- -c, --category=[rights category] Name of the category within which the rights are grouped. To see the list of categories, run zman role-rights-set --help | more.
- -l, --longnames Displays names of the rights. By default, the abbreviated form of the rights name is displayed.

role-rights-set (rlrs) [role name] [rights category] [options]

Allows or denies rights for a ZENworks administrator role.

[rights category] - Name of the category within which the rights are grouped. To see the list of categories, run zman role-rights-set --help | more.

- -a, --allow=[right][...] A comma-separated list of long or short names of the rights to be allowed. To view the rights of each category, run zman role-rights-set --help | more.
- -A, --allow-all Allows all rights of the rights category.
- -d, --deny=[right][...] A comma-separated list of long or short names of the rights to be denied.

 To view the rights of each category, run zman role-rights-set --help | more.
- -D, --deny-all Denies all rights of the rights category.
- -u, --unset=[right][...] A comma-separated list of long or short names of the rights to be unset.

 To view the rights of each category, run zman role-rights-set --help | more.
- -H, --help Displays detailed help about the categories of rights available, and the long and short names of the rights within each category. If a category name is specified, help is provided on the rights for that category.

Ruleset Commands

These commands are used to create and modify registration rule sets. Rule sets are applied to new devices registering to the ZENworks server that do not present a registration key. The commands require a device type to be specified, then the command determines the type of device folder and device group the rule set is associated with, and therefore determines the type of the registering devices. Rule set commands begin with ruleset- in the long form, or with the letter rs in the short form.

All of the commands below accept the option flags listed in the Global Options section. In addition, they accept individual options as listed with each command.

- "ruleset-add-device-groups (rsadg) (device type) (rule set name or position) (device group path) [...] [options]" on page 81
- "ruleset-add-rule (rsar) (rule set name or position) (add mode) (rule group position) (rules file)" on page 82
- "ruleset-create (rsc) (device type) (rule set name) (rules file) [position] [options]" on page 82
- "ruleset-copy (rscp) (rule set name or position) (new name) [position]" on page 83
- "ruleset-export-rules-to-file (rsertf) (rule set name or position)
 (XML file path)" on page 84
- "ruleset-delete (rsd) (rule set name or position)" on page 84
- ◆ "ruleset-info (rsi) (rule set name or position)" on page 84
- "ruleset-list (rsl)" on page 84
- "ruleset-list-device-groups (rsldg) (rule set name or position)" on page 84
- "ruleset-move (rsmv) (rule set name or position) (new position)" on page 84
- "ruleset-remove-device-groups (rsrdg) (device type) (rule set name or position) (device group path) [...] [options]" on page 85
- ◆ "ruleset-remove-rule (rsrr) (rule set name or position) (rule positions) [...]" on page 85
- "ruleset-rename (rsr) (rule set name or position) (new name)" on page 85
- "ruleset-update (rsu) (device type) (rule set name or position) [options]" on page 85

ruleset-add-device-groups (rsadg) (device type) (rule set name or position) (device group path) [...] [options]

Adds membership in the specified device groups for devices imported by using the specified rule set.

(device type) - Type of the registering device. Valid values are server and workstation.

(rule set name or position) - Specify the name of the rule set or its position within the rule sets. The first rule set is at position 1.

(device group path) - Specify the device group path relative to the root folder of the device type.

Accepts the following option:

-f, --folder=[device folder] - The path of the device folder relative to root folder of device type specified. If this option is specified, the path of the device objects is determined relative to this folder. This can be used to specify multiple device objects under the same folder.

ruleset-add-rule (rsar) (rule set name or position) (add mode) (rule group position) (rules file)

Adds rules or rule groups to a rule set.

(rule set name or position) - Specify the name of the rule set or its position within the rule sets. The first rule set is at position 1.

(add mode) - Specify the mode of addition, whether rules or rule groups are being added. Valid values are rule and rulegroup. If mode is rule, all rules across rule groups in the input file will be picked and added.

(rules group position) - Specify the position of the rule group. If you are adding rule groups, this refers to the position the new groups must be inserted at. If you are adding rules, it refers to the position in the rule group where the new rule needs to be added. To point to the last rule group, specify *last*. To add rules in a new rule group or to add rule groups at the end of the list, specify *makenew*. The first rule group is at position 1.

(rules file) - The path of the XML file containing the information of rules or rule groups to be added to the rule set. The XML file can be created by exporting rules of an existing rule set using ruleset-export-rules-to-file command. The conjunction specified in the XML file is immaterial. Alternately, to add only rules, the older format can still be used.

For the file format, refer to AddRulesToRuleSet.txt located in /opt/novell/zenworks/share/zman/samples/rulesets on a Linux Server or <Installation directory>:\Novell\Zenworks\share\zman\samples\rulesets on a Windows Server.

For example:

To add rule groups at position 4 in a rule set:

zman rsar ruleset2 rulegroup 4 C:\RuleGroups.xml

To add rules to the third rule group of a rule set:

zman rsar ruleset2 rule 3 C:\Rules.xml

To add rules to the last rule group of a rule set:

zman rsar ruleset2 rule last C:\Rules.xml

To add rules as a new rule group in a rule set:

zman rsar ruleset2 rule makenew C:\Rules.xml

ruleset-create (rsc) (device type) (rule set name) (rules file) [position]
[options]

Creates a new rule set to apply when registering a device without a registration key.

(device type) - Type of the registering device. Valid values are server and workstation.

(rule set name) - Specify the name of the rule set.

(rules file) - The path of the XML file containing the information of rules or rule groups for the new rule set. The XML file can be created by exporting rules of an existing rule set by using the ruleset-export-rules-to-file command. Alternately, to add only rules (conjunction being AND), the older format can still be used.

For a sample of the file format, see the AddRulesToRuleSet.txt file located in /opt/novell/zenworks/share/zman/samples/rulesets on a Linux server or Installation_directory:\Novell\Zenworks\share\zman\samples\ rulesets on a Windows server.

(position) - Position of the rule set among the rule sets. The first rule set is at position 1. Accepts the following options:

- -f, --devicefolder=[device folder] The path of the device folder relative to the root folder of the device type specified. Registering devices are placed in this folder.
- -g, --devicegroup=[device group path][...] A comma-separated list of paths of the device groups. The paths specified should be relative to the root folder of the device type specified. A registered device becomes a member of these device groups.
- --desc=[description] Description for the rule set.
- --site=[site] The site where the devices are located. Registering devices are populated with this site information.
- --dept=[department] The department in which the devices are used. Registering devices are populated with this department information.
- --loc=[location] The physical location of the devices. Registering devices are populated with this location information.

For example:

To create a rule set for registering servers:

zman rsc server rulesetl C:\RuleSetl.xml --devicefolder serverfolder --desc "rule to import servers" --site "Building A" --dept Finance --loc Brazil

Any registering device that evaluates to true for the rules defined in this rule set is placed in the /Devices/Servers/serverfolder folder with the given site, department, and location values.

To create a rule set for registering workstations that might become members of some workstation groups:

zman rsc workstation ruleset3 --devicegroup wsgroup1,wsfolder/ wsgroup2

The association of device groups to a rule set can also be done after the rule set creation by using the ruleset-add-device-group command.

ruleset-copy (rscp) (rule set name or position) (new name) [position] Copies a ruleset.

(rule set name or position) - Specify the name of the rule set or its position within the rule sets. The first rule set is at position 1.

(new name) - New name to be given to the copied ruleset.

(position) - Position of the rule set among the rule sets. The first rule set is at position 1.

For example:

To copy a rule set to the first position:

```
zman rscp ruleset3 newruleset 1
```

Note: If the new position specified is 0 or greater than the number of rule sets, the rule set is copied to the beginning or the end of the list, respectively.

ruleset-export-rules-to-file (rsertf) (rule set name or position) (XML file path)

Exports the rules of a rule set to a file.

(rule set name or position) - Specify the name of the rule set or its position within the rule sets. The first rule set is at position 1.

(XML file path) - Specify the file in which the rules will be stored in XML format.

For example:

To export rules from a rule set:

```
zman rsertf ruleset1 C:\ExportedRuleSet.xml
```

ruleset-delete (rsd) (rule set name or position)

Deletes a rule set.

(rule set name or position) - Specify the name of the rule set or its position within the rule sets. The first rule set is at position 1.

ruleset-info (rsi) (rule set name or position)

Displays detailed information about a rule set.

(rule set name or position) - Specify the name of the rule set or its position within the rule sets. The first rule set is at position 1.

For example:

To display details about the ruleset MyRegRule:

```
zman rsi MyRegRule
```

ruleset-list (rsl)

Lists all rule sets.

ruleset-list-device-groups (rsldg) (rule set name or position)

Lists the device groups associated with a rule set.

(rule set name or position) - Specify the name of the rule set or its position within the rule sets. The first rule set is at position 1.

ruleset-move (rsmv) (rule set name or position) (new position)

Changes the position of a rule set.

(rule set name or position) - Specify the name of the rule set or its position within the rule sets. The first rule set is at position 1.

(new position) - Specify the new position to which the rule set needs to be moved.

For example:

```
zman rsmv ruleset3 1
```

Note: If the new position specified is 0 or greater than the number of rule sets, the rule set is moved to the beginning or the end of the list, respectively.

ruleset-remove-device-groups (rsrdg) (device type) (rule set name or position) (device group path) [...] [options]

Removes the association of device groups to a rule set.

(device type) - Type of the registering device. Valid values are server and workstation.

(rule set name or position) - Specify the name of the rule set or its position within the rule sets. The first rule set is at position 1.

(device group path) - Path of the device groups relative to the root folder of the device type specified.

Accepts the following option:

-f, --folder=[device folder] - The path of the device folder relative to root folder of the device type specified. If this option is specified, the path of the device objects is determined relative to this folder. This can be used to specify multiple device objects under the same folder.

ruleset-remove-rule (rsrr) (rule set name or position) (rule positions) [...]

Removes rules or rule groups from a rule set.

(rule set name or position) - Specify the name of the rule set or its position within the rule sets. The first rule set is at position 1.

(rule positions) - Specify the positions of the rules to be removed. The first rule group is denoted as G1 and the first two rules in G1 are denoted as G1:1,2. The position can be either a group or specific rules within a group.

For example:

To remove the second rule group of a rule set:

```
zman rsrr ruleset2 G2
```

To remove specific rule groups and specific rules from different rule groups:

```
zman rsrr ruleset2 G1:3 G2:2,5,6 G3 G6:4,9 G8
```

ruleset-rename (rsr) (rule set name or position) (new name)

Renames a rule set.

(rule set name or position) - Specify the name of the rule set or its position within the rule sets. The first rule set is at position 1.

(new name) - Specify the new name to be given to the rule set.

ruleset-update (rsu) (device type) (rule set name or position) [options] Updates a rule set.

(device type) - Type of the registering device. Valid values are server and workstation.

(rule set name or position) - Specify the name of the rule set or its position within the rule sets. The first rule set is at position 1.

- -f, --devicefolder=[device folder] The path of the device folder relative to the root folder of the device type specified. Registering devices are placed in this folder.
- --desc=[description] Description for the rule set.

- --site=[site] The site where the devices are located. Registering devices are populated with this site information.
- --dept=[department] The department in which the devices are used. Registering devices are populated with this department information.
- --loc=[location] The physical location of the devices. Registering devices are populated with this location information.

For example:

To update a rule set that registers servers:

```
zman rsu server rulesetl --devicefolder serverfolderl --desc "rule to import servers" --site "Building B" --dept Transport --loc Brazil
```

To modify server groups in which the imported server should become a member use, ruleset-add-device-group and ruleset-remove-device-group commands.

To update the device folder from a workstation folder to a server root folder:

```
zman rsu server ruleset2
```

This command changes the folder to which the registering device needs to be placed; from / Devices/Workstations to /Devices/Servers.

Satellite Server Commands

These commands are used to view, create, and remove Satellite Servers. Satellite Server commands begin with satellite-server-.

NOTE: From the ZENworks 2020 release onwards, promotion of a 32-bit device to a Satellite Server role or addition of a role to an existing 32-bit Satellite Server is no longer supported.

- * "satellite-server-add-content-replication-setting (ssacrs) (path to device) (content type) [-s|--scheduleFileName=file path] [-t|--throttleRate=Throttle Rate] [-d|--duration=Duration] [--noSchedule]" on page 87
- "satellite-server-add-imagingrole|ssaimg) (Path To Device) [Parent Primary Server] [-p|--proxydhcp=ProxyDHCP Service] [-s|--serverPort=Satellite Server Port] (-r|--Content-Replication-Schedule=Satellite Server Content Replication Schedule) [--force-port-change] [--force-parent-change]" on page 87
- * "satellite-server-create (ssc) (path to device)
 ((role),(role),...(role)) [parent primary server] [satellite server
 port] [satellite server secure HTTPS port] [Satellite Server Output
 Throttle Rate] [--enable-ssl=<rolename>,<rolename>,...,<rolename>]
 [--force-port-change] [--force-parent-change]" on page 88
- ◆ "satellite-server-update-joinproxy-settings (ssujs) (Path To Device)
 [-j|--jpport=jpport] [-m|--maxconnections=maxConnections] [-c|-connectionCheckInterval=connectionCheckInterval]" on page 89
- * "satellite-server-delete (ssd) (Path to Device)
 [(role),(role),...(role)][-f|--force]" on page 89

- "satellite-server-configure-authentication-user-source (sscaus) (path to device) (user source) [user connection, user connection,...,user connection]" on page 90
- "satellite-server-edit-imagingrole (sseimg) (path to device) (action on proxydhcp service)" on page 90
- "satellite-server-export-content (ssec) (path to device) (export directory) [options]" on page 90
- * "satellite-server-export-content-replication-setting-schedule
 (ssecrss) (path to device) (content type) (-s | --scheduleFileName =
 file path)" on page 91
- "satellite-server-list-authentication-settings (sslas) (path to device)" on page 91
- ◆ "satellite-server-list-imagingservers (sslimg)" on page 91
- "satellite-server-list-content-replication-settings (sslcrs) (path to device)" on page 91
- "satellite-server-list-roles (sslr) [managed device]" on page 91
- ◆ "Satellite-server-list-servers (ssls)" on page 91
- "satellite-server-remove-content-replication-setting (ssrcrs) (path to device) (content type)" on page 91
- * "satellite-server-remove-imagingrole (ssrimg) (path to device) [-r|--removeImageFiles]" on page 91
- * "satellite-server-update-content-replication-setting (ssucrs) (path to device) (content type) (-s | --scheduleFileName=file path) [options]" on page 92

satellite-server-add-content-replication-setting (ssacrs) (path to device) (content type) [-s|-scheduleFileName=file path] [-t|-throttleRate=Throttle Rate] [-d|-duration=Duration] [-noSchedule]

Add a content type replication schedule and throttle setting to the Satellite device.

(Path To Device) - The full name of the satellite device to which to add the replication setting. (Content Type) - The name of the content type for the replication setting to add to the satellite device.

- -s, --scheduleFileName=<file path> The full path to a file with the schedule data for the replication setting saved in XML format.
- -t, --throttleRate=<throttle rate> The throttle rate in kbps for the replication setting to add to the satellite device.
- -d, --duration=<duration> The content replication duration period (in minutes).
- --noSchedule Use this option if you do not want to specify a schedule for content replication.

satellite-server-add-imagingrole|ssaimg) (Path To Device) [Parent Primary Server] [-p|--proxydhcp=ProxyDHCP Service] [-s|--serverPort=Satellite Server Port] (-r|--Content-Replication-Schedule=Satellite Server Content Replication Schedule) [--force-port-change] [--force-parent-change]

Promotes a managed device to a Satellite Server with the Imaging server role. If the managed device is already functioning as a Satellite Server, this command adds the Imaging server role.

Accepts the following options:

- (Path to Device) The path of the managed device relative to /Devices or the absolute path of the managed device.
- [Parent Primary Server] The path of the Primary Server relative to /Devices or the absolute path of the Primary Server that would act as the parent server to the new Satellite Server.
- -p, --proxydhcp=<ProxyDHCP Service> Starts or stops the Proxy DHCP service. The valid values are start and stop.
- -s, --serverPort=<Satellite Server Port> The port which the satellite server should use to listen for managed device requests. If not specified, port 80 will be used.
- -r, --Content-Replication-Schedule=<Satellite Server Content Replication Schedule> The XML file containing the Content Replication Schedule. In the Content Replication Schedule, enter the number of days, hours and minutes for how often the Satellite Server content should be updated from the parent Primary Server. For the XML format template, refer to ContentReplicationSchedule.xml located in /opt/novell/zenworks/share/zman/samples/schedules/opt/microfocus/zenworks/share/zman/samples/schedules on a Linux server or <Installation directory>:\Novell\Zenworks\share\zman\samples\schedules on a Windows server.
- --force-port-change If the managed device is already functioning as a satellite server this option allows you to change the port that all satellite server components on this device will listen on for managed device requests.
- --force-parent-change If the managed device is already functioning as a satellite server this option allows you to change the Primary Server parent for all satellite server components on the device.

NOTE: Before promoting a managed device as Satellite, ensure that the ZENworks version installed on the managed device is same as that of the Primary Server. Additionally, you cannot promote the following devices as a Satellite:

- A managed device that has a previous version of ZENworks Agent installed.
- A ZENworks test device.

satellite-server-create (ssc) (path to device) ((role),(role),...(role))
[parent primary server] [satellite server port] [satellite server secure
HTTPS port] [Satellite Server Output Throttle Rate] [--enablessl=<rolename>,<rolename>,...,<rolename>] [--force-port-change] [--force-parent-change]

Allows you to configure a Satellite role.

Accepts the following options:

(path to device) - The full name of the managed device to create as a Satellite.

(role) - The Satellite roles to add to the managed device. Roles include Authentication, Collection, and Content and JoinProxy. If you want to assign the Imaging Satellite role or to promote a managed device to a Satellite with the Imaging server role, you must use the zman ssaimg command instead of this command. If you want to reconfigure JoinProxy role settings, you must use the zman ssujs command.

[Parent Primary Server] - The full name of the Primary Server to which the Satellite rolls up its collection data or from which it obtains its content. This field is optional if the managed device is already a Satellite.

[Satellite Server Port] - The port that the Satellite should use to listen for collection roll-up requests or for obtaining content from the parent Primary Server. If it is not specified, port 80 is used.

[Satellite Server Secure HTTPS Port] - The port that the Satellite should use to listen for authentication secure HTTPS requests. If not specified, port 443 is used.

[Satellite Server Output Throttle Rate]: Satellite Server Output Throttle Rate (in KB/s).

- [--force-port-change] If the managed device is already functioning as a Satellite, this option allows you to change the port that all Satellite components on this device listen to for requests or for obtaining content.
- [--force-parent-change] If the managed device is already functioning as a Satellite, this option allows you to change the Primary Server parent for all Satellite components on the device.

NOTE: Before promoting a managed device as Satellite, ensure that the ZENworks version installed on the managed device is same as that of the Primary Server. Additionally, you cannot promote the following devices as a Satellite:

- A managed device that has a previous version of ZENworks Agent installed.
- A ZENworks test device.

A non-root user can successfully execute this command (zman ssc) on a Linux Primary Server only if the user has been added to the ZENworks user group. To add the non-root user to the ZENworks user group, use the usermod -A non-root_username command.

satellite-server-update-joinproxy-settings (ssujs) (Path To Device) [-j|-j| jpport=jpport] [-m|-maxconnections=maxConnections] [-c|-connectionCheckInterval=connectionCheckInterval]

Updates the JoinProxy settings on a Satellite Server. You can promote only a Windows or a Linux managed device to the JoinProxy Satellite role. The Primary Servers have the JoinProxy role by default.

Accepts the following options:

(Path to Device) - The full name of the Satellite Server for which to update the JoinProxy settings.

- -j, --jpport=<jpport> The Port on which the JoinProxy will listen for connection.
- -m, --maxconnections=<maxConnections> Maximum number of devices allowed for connecting to JoinProxy.
- -c, --connectionCheckInterval=<connectionCheckInterval> The time interval for the Join Proxy to periodically check if the devices are still connected to it or not.

NOTE: If you do not use the ssujs command, the JoinProxy Satellite Server will be configured with the following default values:

• Port: 7019

max Connections: 100

connection Check Interval: 1 min

satellite-server-delete (ssd) (Path to Device) [(role),(role),...(role)][f|--force]

Allows you to delete Satellite roles from the device. If all roles are removed, the device will be automatically delisted from the Server Hierarchy listing in ZENworks Control Center.

If your Management Zone consists of ZENworks Primary Server and ZENworks Configuration Management Satellites, you cannot remove individual roles from the Satellites. You can only demote the Satellite to a managed device. You can delete a Satellite that has any version of the ZENworks Agent installed.

Accepts the following options:

(Path to Device) - The full name of the Satellite Server from which to delete the Satellite roles. [role] - The Satellite roles to delete from the device. If no roles are specified, all Satellite roles are deleted from the device. You can delete the following roles: Authentication, Collection, Content and Join Proxy.To remove the Imaging role, use the satellite-server-remove-imagingrole (ssrimg) command instead of this command.

[-f]--force] - Forces the demotion of a Satellite Server to a managed device while removing all the specified, existing roles. Use this option only when a Satellite Server is permanently offline and cannot communicate with the ZENworks server or when all roles are removed and the Satellite Server cannot be removed from the ZCC Server Hierarchy as the ZENworks version on the Satellite Server is older than the ZENworks version on the Primary Server.

satellite-server-configure-authentication-user-source (sscaus) (path to device) (user source) [user connection, user connection,...,user connection]

Configures the user source connections used by a Satellite with the Authentication role. Execute this command multiple times to configure connections for multiple user sources on the same Satellite, specifying a different user source each time. Execute this command with no connections to remove the specified user source from the authentication role of the Satellite.

Accepts the following options:

(Path To Device) - The full name of the Satellite for which to configure the authentication role user source.

(User Source) - The name of the user source to configure.

[User Connection] - User connections listed in order that this Satellite uses to authenticate users against the given user source.

satellite-server-edit-imagingrole (sseimg) (path to device) (action on proxydhcp service)

Starts or stops the Proxy DHCP service of the Imaging Satellite.

(Path to Device) - The path of the device relative to /Devices/Workstations. The device specified must be a Satellite with the Imaging role.

(Action on ProxyDHCP Service) - Starts or stops the Proxy DHCP service. The valid values are start and stop.

satellite-server-export-content (ssec) (path to device) (export directory)
[options]

Exports content files from the content repository for manual import into the Satellite device's content repository. To import the content into the content repository on a managed device, use the zac cdp-import-content (cic) command.

(Path To Device) - The full name of the Satellite device for which to export the content files. (Export Directory) - The full path to a directory to which to export the content files.

Accepts the following options:

-a, --exportAll - Exports all content assigned to the Satellite device (by default, only missing content is exported).

```
satellite-server-export-content-replication-setting-schedule (ssecrss)
(path to device) (content type) (-s | --scheduleFileName = file path)
```

Export the content type replication schedule from the Satellite device to a file.

(Path To Device) - The full name of the satellite device from which to export the replication setting schedule.

(Content Type) - The name of the content type for the replication setting to export from the satellite device.

-s, --scheduleFileName =<file path> - The full path to a file to which to export the schedule data.

satellite-server-list-authentication-settings (sslas) (path to device)

Lists the authentication role settings on a Satellite device.

(path to device) - The full name of the satellite device from which to list the authentication role settings.

satellite-server-list-imagingservers (sslimg)

Lists the Satellites with the Imaging role.

satellite-server-list-content-replication-settings (sslcrs) (path to device)

Lists the content replication schedule and throttle settings on the Satellite by content type.

(path to device) - The full name of the satellite device from which to list the replication settings.

satellite-server-list-roles (sslr) [managed device]

Lists previously defined Satellite roles.

Accepts the following option:

[Managed device] - The full name of the managed device for which to list Satellite roles. If not specified, all available Satellite roles are displayed.

Satellite-server-list-servers (ssls)

Lists the Satellites and their roles.

satellite-server-remove-content-replication-setting (ssrcrs) (path to device) (content type)

Remove a content type replication schedule and throttle setting from the Satellite device.

(Path To Device) - The full name of the satellite device from which to remove the replication setting.

(Content Type) - The name of the content type for the replication setting to remove from the satellite device.

satellite-server-remove-imagingrole (ssrimg) (path to device) [-r|-removeImageFiles]

Removes the Satellite Imaging server role from the managed device.

If your Management Zone consists of ZENworks Primary Server and ZENworks Configuration Management Satellites, you cannot remove individual roles from the Satellites. You can only demote the Satellite to a managed device. You can delete a Satellite that has any version of the ZENworks Agent installed.

(Path to Device) - The path of the managed device relative to /Devices/Workstations. The device specified must be a Satellite with the Imaging role.

-r, --removelmageFiles - Deletes the image files from the specified device.

```
satellite-server-update-content-replication-setting (ssucrs) (path to
device) (content type) (-s | --scheduleFileName=file path) [options]
```

Updates a content type replication schedule and throttle setting to the Satellite device.

(Path To Device) - The full name of the satellite device to which to update the replication setting.

(Content Type) - The name of the content type for the replication setting to update to the satellite device.

-s, --scheduleFileName=(file path) - The full path to a file with the schedule data for the replication setting saved in XML format.

Accepts the following option:

- -d, --duration=<duration> The content replication duration period (in minutes).
- -t, --throttleRate=<Throttle Rate> The throttle rate in kbps for the replication setting to update to the satellite device.

Server Commands

These commands are used to manage servers. Server commands begin with the word server- in the long form, or with the letter s in the short form.

All of the commands below accept the option flags listed in the Global Options section. In addition, they accept individual options as listed with each command.

- "server-add-bundle (sab) (server object path) (bundle or bundle group) [...] [options]" on page 94
- "server-add-certificate (sacert) (server object path) (certificate file path)[-f]" on page 95
- "server-add-policy (sap) (server object path) (policy or policy group) [...] [options]" on page 96
- "server-copy-relationships (scr) (server path) (server object path)
 [...] [options]" on page 96
- "server-delete (sd) (server object path) [...] [options]" on page 97
- "server-folder-create (sfc) [folder name] [parent folder] [options]" on page 97
- "server-group-add (sga) (server group path) [server path] [...] [options]" on page 98
- "server-group-create (sgc) [group name] [parent folder] [options]" on page 98

- "server-group-members (sgm) (server group path) [options]" on page 98
- "server-group-remove (sgr) (server group path) [server path] [...] [options]" on page 98
- "server-info (si) (server path)" on page 98
- "server-list (sl) [options] [folder]" on page 98
- "server-list-bundles (slb) (server object path) [options]" on page 99
- "server-list-groups (slg) (server path) [options]" on page 99
- "server-list-policies (slp) (server object path) [options]" on page 99
- "server-move (smv) (server object path) [destination folder path]" on page 99
- "server-refresh (srf) (server object path) [...] [options]" on page 99
- "server-remove-bundle (srb) (server object path) (bundle or bundle group) [...] [options]" on page 99
- "server-remove-policy (srp) (server object path) (policy or policy group) [...] [options]" on page 100
- ◆ "server-rename (sr) (server object path) (new name)" on page 100
- "server-reorder-bundles (srob) (server object path) (current position) (new position)" on page 100
- "server-reorder-policies (srop) (server object path) (current position) (new position)" on page 100
- "server-retire (sret) (server object path)" on page 100
- "server-set-as-test (ssat) (server object path)" on page 100
- "server-role-zookeeper-add-server (srzas)" on page 100
- "server-role-zookeeper-remove-server (srzrs)" on page 101
- "server-role-zookeeper-list-cluster (srzlc)" on page 101
- "server-role-zookeeper-update-cluster (srzuc) [...] [options]" on page 101
- "server-role-kafka-configure-cluster (srkcc) [...] [options]" on page 101
- "server-role-kafka-add-broker (srkab)" on page 102
- "server-role-kafka-remove-broker (srkrb)" on page 102
- "server-role-kafka-reconfig-broker (srkrcb)" on page 102
- "server-role-kafka-update-cluster (srkuc) [...] [options]" on page 102
- "server-role-kafka-list-cluster (srklc)" on page 102
- ◆ "server-role-kafka-list-connectors (srklcn)" on page 103

- "server-role-kafka-restart-connectors (srkrcn) [...] [options]" on page 103
- "server-role-kafka-get-connector-config (srkgcc) [...] [options]" on page 103
- "server-role-kafka-reconfigure-connectors (srkccn) [...] [options]" on page 103
- "server-role-vertica-create-cluster (srvcc) [...] [options]" on page 103
- "server-role-vertica-add-server (srvas)" on page 103
- "server-role-vertica-remove-server (srvrs)" on page 103
- "server-role-vertica-list-cluster (srvlc)" on page 103
- ◆ "server-role-vertica-update-cluster (srvuc)" on page 103
- "server-role-vertica-get-credentials (srvgc)" on page 104
- "server-role-vertica-prepare-server (srvps)" on page 104
- ◆ "server-set-as-nontest (ssan) (server object path)" on page 104
- "server-statistics (sst) (server path)" on page 104
- "server-unretire (suret) (server object path)" on page 104
- "server-view-all-bundles-status (svabs) (server path) [options]" on page 104
- "server-view-all-policies-status (svaps) (server path) [options]" on page 104
- "server-wakeup (sw) (server object path) [...] [options]" on page 105

server-add-bundle (sab) (server object path) (bundle or bundle group) [...] [options]

Assigns bundles to a server object.

- -f, --folder=[bundle folder] The path of a bundle folder relative to /Bundles. If this option is specified, the path of the bundle objects is determined relative to this folder. This can be used to specify multiple bundle objects under the same folder.
- -I, --icon-location=[application location XML file] XML file that contains the locations to place the icon for the bundle application. For the XML file format, refer to IconLocation.xml located in /opt/novell/zenworks/share/zman/samples/bundles on a Linux server or Installation_directory:\Novell\Zenworks\share\zman\samples\ bundles on a Windows server.
- -d, --distribution-schedule=[distribution schedule XML file] The XML file that contains the distribution schedule.
- -l, --launch-schedule=[launch schedule XML file] The XML file that contains the launch schedule.

- -a, --availability-schedule=[availability schedule XML file] The XML file that contains the availability schedule. For the schedule XML file templates, refer to the XML files located in / opt/novell/zenworks/share/zman/samples/schedules on a Linux server or Installation_directory:\Novell\Zenworks\share\zman\samples\ schedules on a Windows server.
- -D, --dry-run Tests and displays the requested actions but does not actually perform them.
- -i, --install-immediately Installs the bundle immediately after distribution. To use this option, you must also specify the Distribution schedule. The Distribution schedule can be specified by using the --distribution-schedule, --distribute-now, or --distribute-on-device-refresh option.
- -L, --launch-immediately Launches the bundle immediately after installation. To use this option, you must also specify the Distribution schedule. The Distribution schedule can be specified by using the --distribution-schedule, --distribute-now, or --distribute-on-device-refresh option.
- -n, --distribute-now Sets the distribution schedule to distribute the bundle immediately. If this option is specified, the --distribution-schedule and --distribute-on-device-refresh options are ignored. The --distribute-now, --distribute-on-device-refresh, and --distribution-schedule options are mutually exclusive and are used to set the distribution schedule. The --distribute-now option is considered first, followed by --distribute-on-device-refresh and --distribution-schedule.
- -r, --distribute-on-device-refresh Sets the distribution schedule to distribute the bundle on device refresh. If this option is specified, the --distribution-schedule option is ignored.
- -s, --launch-on-device-refresh Sets the launch schedule to launch the bundle on device refresh.

 If this option is specified, the --launch-schedule option is ignored.
- -w, --wakeup-device-on-distribution Wakes up the device by using Wake-On-LAN if it is shut down while distributing the bundle. To use this option, you must also specify the distribution schedule. The distribution schedule can be specified by using the --distribution-schedule, -- distribute-now, or --distribute-on-device-refresh option.
- -B, --broadcast=[Broadcast address][...] A comma-separated list of addresses used to broadcast the Wake-On-LAN magic packets. This option is used only if you choose to wake up the device by using Wake-On-LAN. A valid IP address is a valid value.
- -S, --server=[The path of the Primary or Proxy Server objects relative to /Devices][...] A comma-separated list of Primary or Proxy Server objects used to wake up the device. This option is used only if you choose to wake up the device by using Wake-On-LAN.
- -C, --retries=[Number of retries] Number of times the Wake-On-LAN magic packets are sent to the device(s). This option is used only if you choose to wake up the device by using Wake-On-LAN. The value must be between 0 and 5. The default value is 1.
- -T, --timeout=[Time interval between retries] The time interval between two retries. This option is used only if you choose to wake up the device by using Wake-On-LAN. The value must be between 2 and 10 (in minutes). The default value is 2.

server-add-certificate (sacert) (server object path) (certificate file path)[-f]

Prior to ZENworks 11 SP4, this command was used to add a new valid certificate for a server, replacing the existing certificate that was about to expire. With the introduction of the SSL Management feature in ZENworks 11 SP4, this command has been deprecated.

To add a certificate that is missing in the database, you can use this command with the force (-f, --force) option. However, if there is already an active certificate present in the database, you cannot use this command.

(server object path) - The path of the server objects (server, server folder or server group) relative to /Devices/Servers.

(certificate file path)- Path of the DER format certificate file.

-f, --force - Forces the certificate to the added as the active certificate. This option will work only if an active certificate is not available in the database.

server-add-policy (sap) (server object path) (policy or policy group) [...] [options]

Assigns policies to a server object.

Accepts the following options:

- -c, --conflicts=[policy conflict resolution order] Determines how policy conflicts are resolved. Valid values are userlast or 1, devicelast or 2, deviceonly or 3, useronly or 4. For userlast, device-associated policies are applied first, followed by user-associated policies. For devicelast, user-associated policies are applied first, followed by device-associated policies. For deviceonly, user-associated policies are ignored. For useronly, device-associated policies are ignored. If this option is not specified, userlast is taken as the default value.
- -e, --enforce-now Enforces the policy immediately on all assigned devices.
- -f, --folder=[policy folder] The path of a policy folder relative to /Policies. If this option is specified, the path of the policy objects is determined relative to this folder. This can be used to specify multiple policy objects under the same folder.

server-copy-relationships (scr) (server path) (server object path) [...] [options]

Copies relationships from a selected server to other servers. Server relationships include bundle assignments, policy assignments and group memberships.

- -r, --relationship-type: Relationship types to copy. Valid values are bundles, policies and groups. The option bundles will copy all the associated bundle assignments of the source device. The option policies will copy all the associated policy assignments of the source device. The option groups will add target devices as the member of the groups that are associated with the source devices. You can provide multiple types by comma separated values.
- -a, --assignment-options: Assignment options. The valid values are assign-to-group-members, assign-to-folder-members and assign-to-folder-members-recursively. The option assign-to-group-members will copy the assignments to members of the target groups. The option assign-to-folder-members will copy the assignments to devices inside the target folder. The option assign-to-folder-members-recursively will copy the assignments to devices inside the target folders and its sub folders. if a value is not specified, the assignments are made to the target folders or groups directly.
- -c, --conflict-resolution: Conflict resolution options for existing assignments. The valid values are delete-existing-assignments and replace-existing-assignments. The option delete-existingassignments will delete all the existing assignments of the target devices. The option replaceexisting-assignments will replace the existing assignments of the target devices with the selected assignments. If a value is not specified, the existing assignments on the target devices are retained.

-g, --group-membership: The group membership options for the target object type Groups and Folders. The valid values are add-group-members, add-folder-members, add-folder-members-recursively, and delete-existing-group-membership. The option add-group-members will add members of the target group as members of the groups that source device is member of. The option add-folder-members will add devices inside the target folders as members of the groups that the source device is member of. The option add-folder-members-recursively will add devices inside the target folders and its subfolders as members of the groups that source device is member of. The option delete-existing-group-membership will delete the existing group memberships that the target devices are member of.

Examples:

To copy all the relationships of the source server to multiple servers types:

zman server-copy-relationships serverfolder/sourceserver -relationship-type=bundles,policies,groups serverfolder/server
serverfolder/serverfolder1 serverfolder/servergroup

To copy policy assignments of the source server to the servers inside target server folders recursively: zman scr serverfolder/sourceserver --relationship-type=policies serverfolder1 serverfolder2 -assignment-options=assign-to-folder-members-recursively.

To replace conflict bundle assignments of the target servers while copying the assignments from source server:

To add servers of the target servers groups to the groups of the source server: zman scr serverfolder/sourceserver -r=groups servergroup -group-membership=add-group-members.

zman scr serverfolder/sourceserver -r=bundles serverfolder/server1 conflict-resolution=replace-existing-assignments
zman scr serverfolder/sourceserver -r=groups servergroup
zman server-copy-relationships serverfolder/sourceserver -relationship-type=bundles,policies,groups serverfolder/server
serverfolder/serverfolder1 serverfolder/servergroup -f -p=C:\temp\
zman scr serverfolder/sourceserver --relationship-type=policies
serverfolder1 serverfolder2 -assignment-options=assign-to-foldermembers-recursively -p=C:\temp\copyresult.csv

server-delete (sd) (server object path) [...] [options]

Deletes one or more server objects.

(server object path) [...] - The path of the server objects (server, server folder or server group) relative to /Devices/Servers. The wildcard * can be used in the object names if it is enclosed in quotation marks. Exercise caution while using wildcards for deleting objects.

Accepts the following options:

- -r, --recursive Deletes objects inside a folder recursively.
- -f, --folder=[server folder] The path of a server folder relative to /Devices/Servers. If this option is specified, the path of the server objects is determined relative to this folder. This can be used to specify multiple server objects under the same folder.

server-folder-create (sfc) [folder name] [parent folder] [options]

Creates a new folder for containing servers.

Accepts the following option:

--desc=[description] - Description for the folder.

server-group-add (sga) (server group path) [server path] [...] [options]

Adds servers to a server group.

Accepts the following option:

-f, --folder=[server folder] - The path of a server folder relative to /Devices/Servers. If this option is specified, the path of the server objects is determined relative to this folder. This can be used to specify multiple server objects under the same folder.

server-group-create (sgc) [group name] [parent folder] [options]

Creates a server group and adds members to it.

Accepts the following options:

- --desc=[description] Description for the group.
- -m, --members=[server path][...] The path of the servers relative to /Devices/Servers.
- -f, --folder=[server folder] The path of a server folder relative to /Devices/Servers. If this option is specified, the path of the server objects is determined relative to this folder. This can be used to specify multiple server objects under the same folder.

server-group-members (sgm) (server group path) [options]

Lists members of a server group or a dynamic server group.

Accepts the following option:

-s, --scrollsize=[scrollsize] - Number of results to be displayed at a time.

```
server-group-remove (sgr) (server group path) [server path] [...] [options]
```

Removes servers from a server group.

Accepts the following option:

-f, --folder=[server folder] - The path of a server folder relative to /Devices/Servers. If this option is specified, the path of the server objects is determined relative to this folder. This can be used to specify multiple server objects under the same folder.

```
server-info (si) (server path)
```

Lists detailed information about a server.

server-list (sl) [options] [folder]

Lists server objects.

- -r, --recursive Lists results recursively including subfolders. If this option is not specified, the contents of the subfolders are not listed.
- -n, --namefilter=[filter string] Displays results matching the specified name. The wildcards * and ? can be used if they are enclosed in quotation marks.
- -t, --typefilter=[type filter][...] Displays results matching the comma-separated list of object types specified. Valid values are device, group, and folder.
- -c, --count Displays the count of the results.

- -s, --scrollsize=[scrollsize] Number of results to be displayed at a time.
- -f, --flagfilter=[flag filter][...] Displays results matching the comma-separated list of flags specified. Valid values are retired, notretired, test, and non-test.

server-list-bundles (slb) (server object path) [options]

Lists bundles assigned to a server object.

Accepts the following options:

- -a, --all Lists both effective and non-effective bundles.
- -e, --effective Lists only effective bundles.
- -s, --scrollsize=[scrollsize] Number of results to be displayed at a time.

server-list-groups (slg) (server path) [options]

Lists groups of which the given server is a member.

Accepts the following option:

-s, --scrollsize=[scrollsize] - Number of results to be displayed at a time.

server-list-policies (slp) (server object path) [options]

Lists policies assigned to a server object.

Accepts the following options:

- -a, --all Lists both effective and non-effective policies.
- -e, --effective Lists only effective policies.
- -s, --scrollsize=[scrollsize] Number of results to be displayed at a time.

server-move (smv) (server object path) [destination folder path]

Moves a server object to a different folder.

server-refresh (srf) (server object path) [...] [options]

Refreshes the ZENworks Agent in the servers.

Accepts the following option:

- -f, --folder=[server folder] The path of a server folder relative to /Devices/Servers. If this option is specified, the path of the server objects is determined relative to this folder. This can be used to specify multiple server objects under the same folder.
- --server=<server/server folder/server group object path>[...] The path of Primary Server objects (server, server folder or server group) relative to /Devices/Servers to send Quick Task notifications.
- --notify=<minutes> Time in minutes to notify all devices.
- --expire=<minutes> Time in minutes for expiry after creation of the quick task. Specify 0 to expire immediately.
- --currentserver Add quick task to the current Primary Server.
- --anyserver Add quick task in any of the Primary Servers.
- --expirenever The quick task never expires in the Primary Server.

server-remove-bundle (srb) (server object path) (bundle or bundle group) [...] [options]

Removes bundles assigned to a server object.

Accepts the following option:

-f, --folder=[bundle folder] - The path of a bundle folder relative to /Bundles. If this option is specified, the path of the bundle objects is determined relative to this folder. This can be used to specify multiple bundle objects under the same folder.

server-remove-policy (srp) (server object path) (policy or policy group) [...] [options]

Removes policies assigned to a server object.

Accepts the following option:

-f, --folder=[policy folder] - The path of a policy folder relative to /Policies. If this option is specified, the path of the policy objects is determined relative to this folder. This helps you to specify multiple policy objects under the same folder.

```
server-rename (sr) (server object path) (new name)
```

Renames a server object.

```
server-reorder-bundles (srob) (server object path) (current position) (new position)
```

Changes the order of bundles assigned to a server. Use the server-list-bundles command to get the order of assigned bundles.

```
server-reorder-policies (srop) (server object path) (current position) (new position)
```

Changes the order of policies assigned to a server. Use the server-list-policies command to get the order of assigned policies.

```
server-retire (sret) (server object path)
```

Retires the selected server from your ZENworks system at its next refresh. Retiring a device is different from deleting a device. When you retire a device, its GUID is retained (as opposed to when you delete a device, which also deletes its GUID). As a result, all inventory information is retained and is accessible, but all policy and bundle assignments are removed. If you reactivate the device in the future, its assignments are restored.

Accepts the following option:

-i, --immediate - Forces a device refresh to immediately retire the device.

```
server-set-as-test (ssat) (server object path)
```

Sets a server as a test device.

Examples

To set server1 as a test device:

zman ssat server1

server-role-zookeeper-add-server (srzas)

Assigns the ZooKeeper role to a Primary Server.

--servers - Comma separated list of servers. The GUID, DNS or the path of the server objects (server, server folder or server group) relative to /Devices/Servers.

server-role-zookeeper-remove-server (srzrs)

Removes a server from the Zookeeper cluster. At least one server in the zone must have the ZooKeeper role in it.

--servers - The GUID, DNS or the path of the server objects (server, server folder or server group) relative to /Devices/Servers.

server-role-zookeeper-list-cluster (srzlc)

Lists the currently configured servers in the Zookeeper Cluster.

server-role-zookeeper-update-cluster (srzuc) [...] [options]

Updates the common properties of the Zookeeper Cluster.

Accepts the following options:

- -I --leader-connect-port: Define the leader port that the followers will use to connect to a leader in the cluster. The default port is 6790. However, you can specify an unused port between 6000 and 65535.
- -c --client-port: Define the port on which Zookeeper will listen in for incoming connections. The default port is 6789. However, you can specify an unused port between 6000 and 65535.
- -e --leader-elect-port: Define the election port that all servers in the cluster will use to elect the leader. The default port is 6791. However, you can specify an unused port between 6000 and 65535.
- -t --tick-time: Define the length of a single tick, which is a basic time unit in milliseconds, used by Zookeeper to regulate heartbeats and timeouts. The default value is 2000.
- -i --init-limit: Define the amount of time, in ticks, to allow followers to connect to the leader. The default value is 10.
- -s --sync-limit: Define the amount of time, in ticks, to allow followers to sync with Zookeeper.

 The default value is 5.
- -m --max-cluster-size: Define the size of the Zookeeper cluster. The default value is 3.
- -x --max-connections: Specify the maximum number of client connections that the Zookeeper cluster can accept. The default value is 60.

server-role-kafka-configure-cluster (srkcc) [...] [options]

Configures the Kafka cluster.

- -c --replication count: Specify the number of copies to be made for each topic.
- -I --logRetentionBytes: Specify the maximum permissible size of the log, beyond which, the existing data is overwritten with the new data. By default the log size is unlimited.
- -t --zkSessionTimeout: Specify the Zookeeper session timeout (in milliseconds). The default value is 30000 ms. If the server fails to signal a heartbeat to ZooKeeper within this specified time period, then the server is considered to be dead. A heartbeat request helps identify if the server is still connected to the Kafka cluster.
- -r --retainDetectedLogsDuration: Specify the maximum time to retain deleted logs.
- -p --logCleanupPolicy: Specify the default cleanup policy for segments that exceed the maximum permissible retention window. The possible values are *Delete* and *Compact*. The default value is *Delete*. The *Delete* policy will remove old segments when the retention time or size limit has reached. The *Compact* policy will enable log compaction on the topic, which ensures that Kafka will always retain at least the last known value for each message key within the log of data for a single topic partition.

- -s --schemaregistryport: Specify the port on which the schema registry is running. The default port is 8081.
- -k, --kafkaport: Specify the port on which Kafka listens. The default port is 9093.
- -x, --connectport: Specify the port on which Kafka connect listens. The default port is 8083.

server-role-kafka-add-broker (srkab)

Adds a broker to the Kafka cluster.

- --servers Comma separated list of servers. You can specify the GUID, DNS or the path of the server objects (server, server folder or server group) relative to /Devices/Servers.
- -i --ignorewarning- Specify true or false. This option is used to ignore the warning message related to client authentication certificate that is displayed when an External CA is identified. To proceed, you can set this option as true.

server-role-kafka-remove-broker (srkrb)

Removes a broker from the Kafka cluster.

--servers - The GUID, DNS or the path of the server objects (server, server folder or server group) relative to /Devices/Servers.

server-role-kafka-reconfig-broker (srkrcb)

Reconfigures the Kafka broker.

--servers- Comma separated list of servers. The GUID, DNS or the path of the server objects (server, server folder or server group) relative to /Devices/Servers.

server-role-kafka-update-cluster (srkuc) [...] [options]

Updates the Kafka cluster configuration.

Accepts the following options:

- -I --logRetentionBytes: Specify the maximum permissible size of the log, beyond which, the existing data is overwritten with the new data. By default the log size is unlimited.
- -t --zkSessionTimeout: Specify the Zookeeper session timeout (in milliseconds). The default value is 30000 ms. If the server fails to signal a heartbeat to ZooKeeper within this specified time period, then the server is considered to be dead. A heartbeat request helps identify if the server is still connected to the Kafka cluster.
- -r --retainDetectedLogsDuration: Specify the maximum time to retain deleted logs.
- -p --logCleanupPolicy: Specify the default cleanup policy for segments that exceed the maximum permissible retention window. The possible values are *Delete* and *Compact*. The default value is *Delete*. The *Delete* policy will remove old segments when the retention time or size limit has reached. The *Compact* policy will enable log compaction on the topic, which ensures that Kafka will always retain at least the last known value for each message key within the log of data for a single topic partition.
- -c, --replication count: Specify the number of copies to be made for each topic.
- -s --schemaregistryport: Specify the port on which the schema registry is running.
- -k, --kafkaport: Specify the port on which Kafka listens.
- -x, --connectport: Specify the port on which Kafka connect listens.

server-role-kafka-list-cluster (srklc)

Retrieves the Kafka cluster configuration.

server-role-kafka-list-connectors (srklcn)

Retrieves the list of Kafka connectors.

server-role-kafka-restart-connectors (srkrcn) [...] [options]

Restarts the specified Kafka connectors.

Accepts the following option:

-c --connectors: Specify a comma separated list of connectors.

server-role-kafka-get-connector-config (srkgcc) [...] [options]

Retrieves the Kafka connector configuration details.

Accepts the following option:

-c --connector: Specify the name of the connector to retrieve its configuration details.

server-role-kafka-reconfigure-connectors (srkccn) [...] [options]

Reconfigures the specified Kafka connectors.

Accepts the following option:

-c --connectors: Specify a comma separated list of connectors.

server-role-vertica-create-cluster (srvcc) [...] [options]

Creates a Vertica cluster with one or more nodes. This is the first command that must be run when configuring Vertica.

--servers- A comma separated list of servers. The GUID, DNS or the path of the server objects (server, server folder or server group) relative to /Devices/Servers.

Accepts the following option:

-k --replication-factor: Specify the number of replicas of the data that should exist in the database. You need to specify a value based on the number of nodes in the cluster and the minimum number of nodes required are measured as 2k+1. Vertica recommends a K-safety factor of 1.

server-role-vertica-add-server (srvas)

Adds a server to the Vertica cluster.

--servers - A comma separated list of servers. The GUID, DNS or the path of the server objects (server, server folder or server group) relative to /Devices/Servers.

server-role-vertica-remove-server (srvrs)

Removes a server from the Vertica cluster.

--servers - A comma separated list of servers. The GUID, DNS, or the path of the server objects (server, server folder or server group) relative to /Devices/Servers.

server-role-vertica-list-cluster (srvlc)

Lists the servers within the Vertica cluster.

server-role-vertica-update-cluster (srvuc)

Updates the K-safety factor in the cluster.

Accepts the following option:

-k --replication-factor: Modify the replication factor to indicate the total number of replicas to be maintained within a cluster.

server-role-vertica-get-credentials (srvgc)

Retrieves the Vertica database credentials.

server-role-vertica-prepare-server (srvps)

Prepares the server during the backup and restore process.

(server object path) - GUID, DNS, or the path of the server objects (server, server folder or server group) relative to /Devices/Servers.

server-set-as-nontest (ssan) (server object path)

Sets a server as a non-test device.

Examples

To set server1 as a non-test device:

zman ssan server1

server-statistics (sst) (server path)

Displays statistics of ZENworks server usage.

server-unretire (suret) (server object path)

Reactivates the selected server at its next refresh and reapplies all policy and bundle assignments that the device previously had.

Accepts the following option:

-i, --immediate - Forces a device refresh to immediately unretire the device.

server-view-all-bundles-status (svabs) (server path) [options]

Displays the advanced deployment status of bundles assigned to a server.

Accepts the following options:

- --statusfilter=[status type][...] Filter on the status of Bundle Distribution and Install Events. Valid values are S, R, C, A, F, and P (Success, Partial Success, Completed, Partial Complete, Failure, and Pending). A comma-separated list of status types can be given.
- -s, --scrollsize=[scrollsize] Number of results to be displayed at a time.

Examples

To view the deployment status of bundles assigned to server1:

```
zman svabs server1
```

To view the deployment status of bundles assigned to server1 having bundle deployment status as success or pending:

```
zman svabs server1 --statusfilter S,P
```

server-view-all-policies-status (svaps) (server path) [options]

Displays the advanced deployment status of policies assigned to a server.

- --statusfilter=[status type][...] Filters on the status of Policy Apply Event. Valid values are S, F, and P (Success, Failure, and Pending). A comma-separated list of status types can be given.
- -s, --scrollsize=[scrollsize] Number of results to be displayed at a time.

```
server-wakeup (sw) (server object path) [...] [options]
```

Wakes up a server using Wake-On-LAN.

Accepts the following options:

- -f, --folder=[server folder] The path of a server folder relative to /Devices/Servers. If this option is specified, the path of the server objects is determined relative to this folder. This can be used to specify multiple server objects under the same folder.
- -b, --broadcast=[Broadcast address][...] A comma-separated list of addresses used to broadcast the Wake-On-LAN magic packets. This option is used only if you choose to wake up the device by using Wake-On-LAN. A valid IP address is a valid value.
- -s, --server=[Path of the Primary or Proxy Server objects relative to /Devices][...] A comma-separated list of Primary or Proxy Server objects used to wake up the device. This option is used only if you choose to wake up the device by using Wake-On-LAN.
- -C, --retries=[Number of retries] Number of times the Wake-On-LAN magic packets are sent to the devices. This option is used only if you choose to wake up the device by using Wake-On-LAN. The value must be between 0 and 5. The default value is 1.
- -t, --timeout=[Time interval between retries] The time interval between two retries. This option is used only if you choose to wake up the device by using Wake-On-LAN. The value must be between 2 and 10 (in minutes). The default value is 2.

Settings Commands

These commands are used to set and modify settings. Settings commands begin with settings-in the long form, or with the letter s in the short form.

The Settings commands do not apply to ZENworks Endpoint Security Management settings (Zone Policy settings and Date Encryption Key settings).

All of the commands below accept the option flags listed in the Global Options section. In addition, they accept individual options as listed with each command.

- "settings-copy (scp) (source device or device folder path) (destination device or device folder path) [...] [options]" on page 105
- "settings-export-to-file (setf) [options] (XML file path) [settings name] [...]" on page 106
- "settings-revert (srt) (source device or device folder path) (settings name) [...]" on page 106
- "settings-set (ss) (XML file path) [destination device or device folder path] [...]" on page 106
- "settings-gcm-delete (sgd) [...]" on page 106

settings-copy (scp) (source device or device folder path) (destination device or device folder path) [...] [options]

Copies settings.

(source device or device folder path) - The path of the device or device folder relative to / Devices from which settings have to be copied.

(destination device or device folder path) [...] - The path of the devices or device folders relative to /Devices to which settings must be copied.

Accepts the following option:

-n, --names=[settings name][...] - Names of the settings to be copied from the source path. If this option is not specified, all settings defined at the source path are copied.

settings-export-to-file (setf) [options] (XML file path) [settings name] [...]

Exports settings data (in XML format) to a file. The XML file is to be used as input for creating or modifying settings.

(XML file path) - The file into which the settings data is stored in XML format. If the file does not exist, a new file is created.

[settings name] [...] - Names of the settings to be exported. If this option is not specified, all settings are exported.

Accepts the following options:

- -s, --source=[source device or device folder path] The path of the device or device folder relative to /Devices from which settings must be exported. If this option is not specified, settings are exported from the Zone.
- -e, --effective If specified, the effective settings are retrieved; otherwise, only the settings defined or overridden at the source path are retrieved.

settings-revert (srt) (source device or device folder path) (settings name) [...]

Reverts the settings to that of the parent folder.

(source device or device folder path) - The path of the device or device folder relative to / Devices, whose settings must be reverted.

settings-set (ss) (XML file path) [destination device or device folder path] [...]

Sets settings at various levels.

(XML file path) - XML file containing exported settings information. Use settings-export-to-file (setf) to export settings information into a XML file.

Accepts the following options:

[settings name] [...] - Names of the settings to be exported. If this option is not specified, all settings are exported.

-s, --source=[source device or device folder path] - The path of the device or device folder relative to /Devices for which settings have to be set. If this option is not specified, settings are set at the Zone level.

settings-gcm-delete (sgd) [...]

Deletes the Google Cloud Messaging configured values. You need to restart the ZENworks services for the changes to take effect.

Subscription Commands

These commands are used to create, modify, and manage subscriptions. Subscription commands begin with subscription—in the long form, or with the letters sr in the short form.

This command accepts the option flags listed in the Global Options section. In addition, it accepts individual options, as listed with the command.

- "subscription-create (src) (subscription name) (subscription XML file) [parent folder] [options]" on page 107
- "subscription-folder-create (srfc) (folder name) [parent folder] [options]" on page 108
- "subscription-move (srmv) (subscription object path) [destination folder path]" on page 108
- "subscription-replicate (srr) (subscription-name) [destination folder path] [options]" on page 108
- "subscription-export (sre) (subscription-name) (subscription-data.xml)" on page 108
- "subscription-delete (srd) (Subscription object) [...] [options]" on page 108
- "subscription-list (srl) [options]" on page 109
- "subscription-modify (srm) (subscription-name) (subscription-data.xml) [parent folder] [options]" on page 109
- "subscription-status (srs) (subscription-name) [options]" on page 109
- "subscription-channel-list (srcl) (subscription-name) (repo entity type) [options]" on page 109
- "subscription-copy (srcp) (subscription path) (subscription-name)
 [parent folder] [options]" on page 109
- "subscription-rename (srrn) (subscription object path) (new name)" on page 110
- "subscription-proxy-password (srpp) [Subscription Proxy Password]" on page 110
- "Subscription-unenroll-android-enterprise | sueae [enterprise-id] [NCC-Username] [password-file-path]" on page 110
- "Subscription-clear-ae | sca" on page 110

subscription-create (src) (subscription name) (subscription XML file)
[parent folder] [options]

Creates a new subscription.

(subscription XML file) - XML file containing exported subscription information. Use subscription-export (sre) to export an existing subscription's information into an XML file. If you want to reuse files, template XML files can be created from subscriptions that were created through ZENworks Control Center. For a sample XML file, refer to nu.xml located in

On Linux:/opt/novell/zenworks/share/zman/samples/subscriptions

On

Windows:%ZENWORKS_HOME%\novell\zenworks\share\zman\samples\subscription s

Accepts the following options:

- -d, --desc=[description] Description for the subscription.
- -s, --sysIDpath=[rhel-systemid]

NOTE: This command cannot be executed for Apple VPP subscriptions.

subscription-folder-create (srfc) (folder name) [parent folder] [options]

Creates a new subscription folder.

Accepts the following option:

--desc=[description] - Description for the folder.

subscription-move (srmv) (subscription object path) [destination folder path]

Moves a subscription object to a different folder.

subscription-replicate (srr) (subscription-name) [destination folder path] [options]

Begins a subscription replication.

Accepts the following options:

- -s, --schedule=[XML filename] The XML file that contains the schedule to begin subscription. The Eventsch.xml file is not applicable for subscriptions.
- -r, --fromRepository The repository from which to replicate content.

NOTE: For Apple VPP subscription, the outbound server will not be utilized while executing this command. Hence, you need to ensure that the server on which this command is executed has an Internet connection.

subscription-export (sre) (subscription-name) (subscription-data.xml)

Exports subscription information (in XML format) to a file. The XML file is to be used as input for creating subscriptions.

```
subscription-delete (srd) (Subscription object) [...] [options]
```

Deletes one or more subscription objects. The subscriptions that are in InProgress, Suspended, and Assigned status cannot be deleted.

- -r, --recursive Deletes objects inside a folder recursively.
- -b, --delete-bundles Deletes all the bundles that were created by the specified subscription.
- -f, --folder=[subscription folder] The path of a subscription folder relative to / Subscriptions. If this option is specified, the path of the subscription objects is determined relative to this folder. This option can be used to specify multiple subscription objects under the same folder.

NOTE: This command cannot be executed for Apple VPP subscriptions.

subscription-list (srl) [options]

Lists subscription objects.

Accepts the following options:

- -r, --recursive Lists results recursively, including subfolders. If this option is not specified, the contents of the subfolders are not listed.
- -n, --namefilter=[filter string] Displays results matching the specified name. The wildcards *and? can be used if they are enclosed in quotation marks.
- -c, --count Displays the count of the results.
- -s, --scrollsize=[scrollsize] Number of results to be displayed at a time.

[folder] - Lists the contents of the specified folder. If you do not specify a folder, the contents of the root folder are listed.

subscription-modify (srm) (subscription-name) (subscription-data.xml) [parent folder] [options]

Exports or modifies an existing subscription.

Accepts the following options:

- -d, --desc=[description] Description for the subscription.
- -s, --sysIDpath=[rhel-systemid]

NOTE: This command cannot be executed for Apple VPP subscriptions.

subscription-status (srs) (subscription-name) [options]

Returns the subscription's status.

Accepts the following options:

- -s, --suspend Suspends the replication and changes the subscription status to Suspended.
- -c, --cancel Cancels the replication and changes the subscription status to Canceled.

NOTE: The Suspend and Cancel tasks are not supported while performing a dry run.

subscription-channel-list (srcl) (subscription-name) (repo entity type) [options]

Lists data such as bundles, catalogs, and packages.

Accepts the following options:

- -r, --fromRepository Bypasses the cache and downloads the metadata from the repository from which to replicate the content.
- -i, --ignoreFilters List the content, ignoring any filters that might be configured.

subscription-copy (srcp) (subscription path) (subscription-name) [parent folder] [options]

Copies a subscription.

Accepts the following option:

-d, --desc=description - Description for the bundle.

subscription-rename (srrn) (subscription object path) (new name)

Renames a subscription.

For example, to rename a subscription SLES10Update to SLED10Update, run the command as follows:

zman srrn /Subscription/SLES10Update /Subscription/SLED10Update

subscription-proxy-password (srpp) [Subscription Proxy Password]

Configures the proxy password to be used by any subscription during replication. In this command, the proxy password argument is optional. If you do not enter the proxy password argument, the command prompts you to enter the password.

Subscription-unenroll-android-enterprise | sueae [enterprise-id] [NCC-Username] [password-file-path]

Unenrolls the Android enterprise account.

Accepts the following arguments:

[enterprise-id] Specify the enterprise ID that you want to unenroll

[NCC-username] Specify the NCC user name.

[password-file-path] Specify the location of the password file. Password file can be saved in any file format.

Example: sueae LC046w6dx5 MFtest C:\password.txt

In this example, LC046w6dx5 is the enterprise ID, MFtest is the NCC username and C:\password.txt is the location where the password is saved.

Subscription-clear-ae | sca

Deletes data associated with unenrolled Android enterprise subscription such as bundles, apps, users and other related data.

System Update/Product Recognition Update Commands

These commands are used to manage System Updates and Product Recognition Updates (PRUs) to ZENworks. These commands begin with system-update in the long form, or with the letters su in the short form.

- "system-update-download (sud) (system update or PRU name)" on page 111
- "system-update-view-available (suva) [options]" on page 111
- "system-update-status (sus) (system update or PRU name)" on page 111
- "system-update-delete-update (sudu) (system update or PRU name) [options]" on page 111
- "system-update-cancel-download (sucd) (system update or PRU name)" on page 112
- "system-update-assign (sua) (system update name) [device path] [...] [option]" on page 112

- ◆ "system-update-list-assign (sula) (device path)" on page 112
- "system-update-authorize (suaz) (system update or PRU name)" on page 112
- "system-update-baseline (sub) (system update name)" on page 112
- "system-update-import (sui) (path to update) [system update or PRU name] [-b, --checkbaseline]" on page 112
- "system-update-activate-entitlement (suae) (mail ID) (activation code)" on page 112
- ◆ "system-update-view-entitlement-status (suves)" on page 113
- "system-update-rebuild-packages (surp) (system update name)" on page 113
- "system-update-patch-file (supf) (system update name) (path to patch)" on page 113
- ◆ "(system-update-create-package | sucp) (system update name) [device path] [-n|--packagename=Standalone update package name] [-p|--platform=OS Platform] [-a|--arch=Architecture]" on page 113

system-update-download (sud) (system update or PRU name)

Downloads the latest system updates or PRU.

(system update or PRU name) - System update or PRU name or UID.

system-update-view-available (suva) [options]

Displays a list of all available updates or PRUs published on the update server or in an update file.

Accepts the following options:

- -i, --importFile=[path to import file/directory] Full path to the import file to query.
- -u, --url=[url to update server] URL for the system update server to query in the format http://servername:[port]/path.
- -f, --product=[product code] The product code to check for updates (for example, zcm, pru).
- -v, --version=[product base version] The base version of the product to check for updates (for example, 10.0, 10.1).

system-update-status (sus) (system update or PRU name)

Displays the status of the specified system update or PRU.

(system update or PRU name) - System update or PRU name or UID.

system-update-delete-update (sudu) (system update or PRU name) [options]

Deletes a specified system update or PRU from the zone.

(system update or PRU name) - System update or PRU name or UID.

Accepts the following option:

-f, --force - Forces the update to be deleted. The assignment is removed only from the server. If you refresh the device and see the update, then update will be applied on that device. Use with caution, and only if you are sure that the update is not in an active state.

system-update-cancel-download (sucd) (system update or PRU name)

Cancels the download of the system update or PRU.

(system update or PRU name) - System update or PRU name or UID.

system-update-assign (sua) (system update name) [device path] [...] [option]

Assigns the authorized system update to devices.

(system update name) - System update name or UID.

[device path] [...] - The path of the device relative to /Devices.

Accepts the following option:

-a, --all - Assign to all devices.

system-update-list-assign (sula) (device path)

Lists all updates assigned to the specified device or group.

(device path) - The path of the device relative to $/ {\tt Devices}$.

system-update-authorize (suaz) (system update or PRU name)

Authorizes an update or PRU.

(system update or PRU name) - System update or PRU name or UID.

system-update-baseline (sub) (system update name)

Schedules an attempt to set the specified update as the baseline update.

(system update name) - System update name or UID.

system-update-import (sui) (path to update) [system update or PRU name] [-b, --checkbaseline]

Imports a system update or PRU from a ZIP file or directory into the Zone. After the update or PRU is in the ZENworks system, it can be managed the same way that online updates or PRUs are managed.

(path to update) - The full path to the update or PRU ZIP file or directory.

(system update or PRU name) - System update or PRU name or UID.

(-b, --checkbaseline) - Check for and if applicable, baseline the update. The default is to not baseline the update.

system-update-activate-entitlement (suae) (mail ID) (activation code)

Activates the System Update entitlement for the ZENworks software in the Management Zone to receive the latest version of ZENworks System Updates and Product Recognition Updates (PRUs) from the Micro Focus Customer Center server.

(mail ID) - A valid e-mail address to be used for communication from Micro Focus. We recommended that you specify the e-mail address used to purchase the System Update Maintenance Entitlement.

(activation code) - The System Update entitlement activation code.

NOTE: Before activating the entitlement, ensure that the Primary Server you want to use to activate the entitlement can communicate with the NCC server (https://secure-www.novell.com).

system-update-view-entitlement-status (suves)

Displays the System Update entitlement status.

system-update-rebuild-packages (surp) (system update name)

Rebuilds the deployment packages on this server with the content of the specified update.

(system update name) - System update name or UID.

-f, --force - Force the package to be rebuild, even if there are no new packages included in the update.

system-update-patch-file (supf) (system update name) (path to patch)

Patches an update with new versions of file(s). On a linux server, the ZIP file should be present in the /var/tmp/ location.

(system update name) - System update name or UID.

(path to patch) - Full path of the zip file or the folder where patch files can be found.

(system-update-create-package | sucp) (system update name) [device path] [-n|--packagename=Standalone update package name] [-p|--platform=OS Platform] [-a|--arch=Architecture]

Creates the specified standalone update package. This command can be used to create a package for a specific device, using the Update GUID and the device GUID, or to create a package for the platform using the platform and architecture details.

(system update name) - System update name or UID.

[device path] - Path of the device relative to /Devices.

- -n, --packagename=<Standalone update package name> Name of standalone update package. If not specified, name is calculated from the device name or the platform specified.
- -p, --platform=<OS Platform> OS platform for the standalone update package. Valid value is *Windows*.
- -a, --arch=<Architecture> Device architecture for the standalone update package. Valid values are 32 or 64.

User Commands

These commands are used to manage users, belonging to the user sources configured in ZENworks. The user sources are to be configured from an existing LDAP Authoritative Source like e-Directory or Active Directory. The user source commands listed in this section also enable you to manage and display certificates. User commands begin with user- in the long form, or with the letter u in the short form.

All of the commands below accept the option flags listed in the Global Options section. In addition, they accept individual options as listed with each command.

- "user-add-bundle (uab) (user object path) (bundle or bundle group)
 [...] [options]" on page 115
- "user-add-policy (uap) (user object path) (policy or policy group) [...] [options]" on page 116
- "user-container-create (ucc) (user source) (user container) (display name)" on page 116
- "user-group-add (uga) (ZENworks user group path) (user path) [...] [options]" on page 116
- "user-group-create (ugc)(group name)[options]" on page 116
- "user-group-delete (ugd) (ZENworks user group path) [...]" on page 116
- "user-group-members (ugm) (user group path) [options]" on page 117
- "user-source-refresh (usr)" on page 117
- "user-group-remove (ugr)(ZENworks user group path) (user path) [...] [options]" on page 117
- "user-info (ui) (user path)" on page 117
- "user-list (ul) [options] [folder]" on page 117
- "user-list-bundles (ulb) (user object path) [options]" on page 117
- "user-list-groups (ulg) (user path) [options]" on page 117
- "user-list-policies (ulp) (user object path) [options]" on page 117
- "user-logged-in-devices (ulid) (user path)" on page 118
- "user-primary-workstation (upws) (user path)" on page 118
- "user-remove-bundle (urb) (user object path) (bundle or bundle group) [...] [options]" on page 118
- "user-remove-policy (urp) (user object path) (policy or policy group) [...] [options]" on page 118
- "user-reorder-policies (urop) (user object path) (current position) (new position)" on page 118
- "user-set-as-test (usat) (user object path)" on page 118
- "user-set-as-nontest (usan) (user object path)" on page 118
- "user-source-create (usc) (user source XML file path) [options]" on page 118
- "user-source-list (usl)" on page 120

- ◆ "user-source-list-connections (uslc) (user source)" on page 121
- "user-source-remove-connection (usrc) (user source) (connection name)" on page 121
- "user-source-trustedcert-add (usta) (certificate alias) (certificate file path)" on page 121
- ◆ "user-source-trustedcert-list (ustl)" on page 121
- "user-source-trustedcert-remove, ustr (certificate alias)" on page 121
- * "user-source-add-connection (usac) (user source) (connection name)
 (server address) (server port) [options]" on page 121
- "user-view-all-bundles-status (uvabs) (user path) [options]" on page 121
- "user-view-all-policies-status (uvaps) (user path) [options]" on page 121

user-add-bundle (uab) (user object path) (bundle or bundle group) [...] [options]

Assigns bundles to a user object.

Accepts the following options:

- -f, --folder=[bundle folder] The path of a bundle folder relative to /Bundles. If this option is specified, the path of the bundle objects is determined relative to this folder. This can be used to specify multiple bundle objects under the same folder.
- -I, --icon-location=[application location XML file] XML file that contains the locations to place the icon for the bundle application. For the XML file format, refer to IconLocation.xml located in /opt/novell/zenworks/share/zman/samples/bundles on a Linux server or Installation_directory:\Novell\Zenworks\share\zman\samples\ bundles on a Windows server.
- -d, --distribution-schedule=[distribution schedule XML file] XML file that contains the distribution schedule.
- -I, --launch-schedule=[launch schedule XML file] XML file that contains the launch schedule.
- -b, --install-schedule=[install schedule XML file] XML file that contains the install schedule.
- -a, --availability-schedule=[availability schedule XML file] XML file that contains the availability schedule. For the schedule XML file templates, refer to the XML files located in /opt/novell/zenworks/share/zman/samples/schedules on a Linux server or Installation_directory:\Novell\Zenworks\share\zman\samples\ schedules on a Windows server.
- -i, --install-immediately Installs the bundle immediately after distribution. To use this option, you must also specify the distribution schedule. The distribution schedule can be specified by using the --distribution-schedule, --distribute-now, or --distribute-on-device-refresh option.
- -L, --launch-immediately Launches the bundle immediately after installation. To use this option, you must also specify the distribution schedule. The distribution schedule can be specified by using the --distribution-schedule, --distribute-now, or --distribute-on-device-refresh option.
- -n, --distribute-now Sets the distribution schedule to distribute the bundle immediately. If this option is specified, the --distribution-schedule and --distribute-on-device-refresh options are ignored. The --distribute-now, --distribute-on-device-refresh, and --distribution-schedule

options are mutually exclusive and are used to set the distribution schedule. The --distribute-now option is considered first, followed by --distribute-on-device-refresh and --distribution-schedule.

- -r, --distribute-on-device-refresh Sets the distribution schedule to distribute the bundle on device refresh. If this option is specified, the --distribution-schedule option is ignored.
- -s, --launch-on-device-refresh Sets the launch schedule to launch the bundle on device refresh.

 If this option is specified, the --launch-schedule option is ignored.

user-add-policy (uap) (user object path) (policy or policy group) [...] [options]

Assigns policies to a user object.

Accepts the following options:

- -e, --enforce-now Enforces the policy immediately on all assigned devices.
- -f, --folder=[policy folder] The path of a policy folder relative to /Policies. If this option is specified, the path of the policy objects is determined relative to this folder. This can be used to specify multiple policy objects under the same folder.

user-container-create (ucc) (user source) (user container) (display name)

Adds a user container to a user source configured in ZENworks.

(user container) - The user container to be added in RDN (Relative Distinguished Name) format, relative to the root context of the LDAP Source.

(display name) - Displays the name for the user container.

```
user-group-add (uga) (ZENworks user group path) (user path) [...] [options]
```

Adds users to a ZENworks user group.

Accepts the following option:

-f, --folder=[user folder] - The path of a user folder relative to /Users. If this option is specified, the path of the user objects is determined relative to this folder. This can be used to specify multiple user objects under the same folder.

user-group-create (ugc)(group name)[options]

Creates a ZENworks user group and adds members to it.

Accepts the following options:

- --desc=[description] Description for the group.
- -m, --members=[user path][...] The path of the users relative to /Users.
- -f, --folder=[user folder] The path of a user folder relative to /Users. If this option is specified, the path of the user objects is determined relative to this folder. This can be used to specify multiple user objects under the same folder.

```
user-group-delete (ugd) (ZENworks user group path) [...]
```

Deletes one or more ZENworks user groups.

(ZENworks user group path) [...] - The path of the ZENworks user group relative to /Users/ ZENworks User Groups.

user-group-members (ugm) (user group path) [options]

Lists members of a ZENworks user group or LDAP Directory user group.

Accepts the following option:

-s, --scrollsize=[scrollsize] - Number of results to be displayed at a time.

user-source-refresh (usr)

Initiates a refresh on all the user sources.

user-group-remove (ugr)(ZENworks user group path) (user path) [...] [options]

Removes users from a ZENworks user group.

Accepts the following option:

-f, --folder=[user folder] - The path of a user folder relative to /Users. If this option is specified, the path of the user objects is determined relative to this folder. This can be used to specify multiple user objects under the same folder.

user-info (ui) (user path)

Lists detailed information about a user.

user-list (ul) [options] [folder]

Lists user objects.

Accepts the following options:

- -r, --recursive Lists results recursively including subfolders. If this option is not specified, the contents of the subfolders are not listed.
- -n, --namefilter=[filter string] Displays results matching the specified name. The wildcards * and ? can be used if they are enclosed in quotation marks.
- -t, --typefilter=[type filter][...] Displays results matching the comma-separated list of object types specified. Valid values are user, group, and folder.
- -c, --count Displays the count of the results.
- -s, --scrollsize=[scrollsize] Number of results to be displayed at a time.

user-list-bundles (ulb) (user object path) [options]

Lists bundles assigned to a user object.

Accepts the following options:

- -a, --all Lists both effective and non-effective bundles.
- -e, --effective Lists only effective bundles.
- -s, --scrollsize=[scrollsize] Number of results to be displayed at a time.

user-list-groups (ulg) (user path) [options]

Lists groups of which the given user is a member.

Accepts the following option:

-s, --scrollsize=[scrollsize] - Number of results to be displayed at a time.

user-list-policies (ulp) (user object path) [options]

Lists policies assigned to a user object.

```
-a, --all - Lists both effective and non-effective policies.
```

- -e, --effective Lists only effective policies.
- -s, --scrollsize=[scrollsize] Number of results to be displayed at a time.

user-logged-in-devices (ulid) (user path)

Displays the devices on which a user is logged in.

```
user-primary-workstation (upws) (user path)
```

Lists the user's primary workstation, number of logins, and number of minutes that the user has been logged in to the primary workstation.

user-remove-bundle (urb) (user object path) (bundle or bundle group) [...] [options]

Removes bundles assigned to a user object.

Accepts the following option:

-f, --folder=[bundle folder] - The path of a bundle folder relative to /Bundles. If this option is specified, the path of the bundle objects is determined relative to this folder. This can be used to specify multiple bundle objects under the same folder.

user-remove-policy (urp) (user object path) (policy or policy group) [...] [options]

Removes policies assigned to a user object.

Accepts the following option:

-f, --folder=[policy folder] - The path of a policy folder relative to /Policies. If this option is specified, the path of the policy objects is determined relative to this folder. This can be used to specify multiple policy objects under the same folder.

user-reorder-policies (urop) (user object path) (current position) (new position)

Changes the order of policies assigned to a user.

```
user-set-as-test (usat) (user object path)
```

Sets an user as a test user.

Examples

To set user1 as a test user:

zman usat user1

user-set-as-nontest (usan) (user object path)

Sets an user as a non-test user.

Examples

To set user1 as a non-test user:

zman usan user1

user-source-create (usc) (user source XML file path) [options]

Configures a user source.

Accepts the following option:

-a, --accept-certificate - Accepts the certificate presented by the user source when SSL mode is chosen. This option is provided to avoid interactive mode for scripting. It is advisable to view the certificate and then accept it.

The xml file should include the following content:

For Active Directory

```
<UserSourceInformation xmlns="http://novell.com/zenworks/zman/</pre>
usersource | xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
<!--Configuring a user source, allows bundle and policy objects to be
assigned to identities contained in an LDAP directory -->
  <!--Please enter the connection information for the LDAP directory.--
  <ConnectionInformation>
<!--Specify the IP Address of the LDAP Server. For example,
192.168.1.60-->
    <Address>xxx.xxx.xx.xx</Address>
    <UseSSL>true</UseSSL>
    <IgnoreDynamicGroups>false</IgnoreDynamicGroups>
    <Port>636</Port>
<!--389 is the default non-ssl port -->
    <RootLDAPContext></RootLDAPContext>
  </ConnectionInformation>
  <!--Please enter the LDAP credentials that will be used when
information is needed from the user source.
      These credentials need to provide read access to the contexts of
your tree where users reside. -->
  <CredentialsInformation>
    <Username>ZENworks@domain.com</Username>
    <Password>Password</Password>
  </CredentialsInformation>
  <!--Include the containers of your user source where your users
reside. In order to minimize browsing
       include user containers directly. You may include any number of
containers independently and manage them as a set or individually-->
  <UserContainers>
    <UserContainer>
      <Context>cn=Users</Context>
      <DisplayName>Users</DisplayName>
    </UserContainer>
  </UserContainers>
  <!-- Optionally include authentication mechanisms to use with your
user source. Add zero or more mechanism types.
       Accepted mechanisms are "Username/Password" and "Kerberos". -->
  <Mechanism><Type>Username/Password</Type></Mechanism>
  <!--Mechanism><Type>Kerberos</Type></Mechanism-->
</UserSourceInformation>
```

For eDirectory

```
<UserSourceInformation xmlns="http://novell.com/zenworks/zman/</pre>
   usersource xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
   <!--Configuring a user source, allows bundle and policy objects to be
   assigned to identities contained in an LDAP directory-->
     <!--Please enter the connection information for the LDAP directory.--
     <ConnectionInformation>
   <!--Specify the IP Address of the LDAP Server. For example,
   192.168.1.60-->
       <Address>xxx.xx.xx.xx</Address>
       <UseSSL>true</UseSSL>
       <IgnoreDynamicGroups>false</IgnoreDynamicGroups>
       <Port>636</Port>
   <!--389 is the non-ssl port-->
       <RootLDAPContext></RootLDAPContext>
     </ConnectionInformation>
     <!--Please enter the LDAP credentials that will be used when
   information is needed from the user source.
          These credentials need to provide read access to the contexts of
   your tree where users reside. -->
     <CredentialsInformation>
       <Username>cn=admin,o=novell</Username>
       <Password>novell
     </CredentialsInformation>
     <!--Include the containers of your user source where your users
   reside. In order to minimize browsing
           include user containers directly. You may include any number of
   containers independently and manage them as a set or individually-->
     <UserContainers>
       <UserContainer>
         <Context>ou=Container1,o=Novel1</Context>
         <DisplayName>Container1/DisplayName>
       </UserContainer>
       <UserContainer>
         <Context>ou=Container2,o=Novell</Context>
         <DisplayName>Container2</DisplayName>
       </UserContainer>
     </UserContainers>
     <!-- Optionally include authentication mechanisms to use with your
   user source. Add zero or more mechanism types.
          Accepted mechanisms are "Username/Password" and "Shared Secret".
     <Mechanism><Type>Username/Password</Type></Mechanism>
     <Mechanism><Type>Shared Secret</Type></Mechanism>
   </UserSourceInformation>
user-source-list (usl)
   Lists the configured user sources.
```

user-source-list-connections (uslc) (user source)

List the server connections for a user source.

user-source-remove-connection (usrc) (user source) (connection name)

Removes a server connection from a user source.

user-source-trustedcert-add (usta) (certificate alias) (certificate file path)

Adds an additional trusted certificate for another LDAP server that can be referred to during the processing of an LDAP search request when using secure user source connections.

(certificate alias) - The alias used to identify the certificate in the key store.

(certificate file path) - The path to the DER format certificate file.

user-source-trustedcert-list (ust1)

Lists the additional trusted certificates used for secure user source connections.

user-source-trustedcert-remove, ustr (certificate alias)

Removes a trusted certificate used for secure user source connections.

(certificate alias) - The alias used to identify the certificate in the key store.

user-source-add-connection (usac) (user source) (connection name) (server address) (server port) [options]

Adds a new server connection for a user source.

Accepts the following options:

- -a, --accept-certificate Accepts the certificate presented by the user source when SSL mode is chosen. This option is provided to avoid interactive mode for scripting. It is advisable to view the certificate and then accept it.
- -s, --use-ssl Specifies that SSL should be used when accessing the new server.

user-view-all-bundles-status (uvabs) (user path) [options]

Displays the advanced deployment status of bundles assigned to a user.

Accepts the following options:

- --statusfilter=[status type][...] Filters on the status of Bundle Distribution and Install Events. Valid values are S, F, and P (Success, Failure, and Pending). A comma-separated list of status types can be given.
- -s, --scrollsize=[scrollsize] Number of results to be displayed at a time.

user-view-all-policies-status (uvaps) (user path) [options]

Displays the advanced deployment status of policies assigned to a user.

Accepts the following options:

- --statusfilter=[status type][...] Filters on the status of Policy Apply Event. Valid values are S, F, and P (Success, Failure, and Pending). A comma-separated list of status types can be given.
- -s, --scrollsize=[scrollsize] Number of results to be displayed at a time.

Workstation Commands

These commands are used to manage workstations. Workstation commands begin with workstation—in the long form, or with the letter w in the short form.

All of the commands below accept the option flags listed in the Global Options section. In addition, they accept individual options as listed with each command.

- "workstation-add-bundle (wab) (workstation object path) (bundle or bundle group) [...] [options]" on page 123
- "workstation-add-policy (wap) (workstation object path) (policy or policy group) [...] [options]" on page 124
- "workstation-copy-relationships (wcr) (workstation path) (workstation object path) [...] [options]" on page 124
- "workstation-delete (wd) workstation object path) [...] [options]" on page 126
- "workstation-folder-create (wfc) (folder name) [parent folder] [options]" on page 126
- "workstation-group-add (wga) (workstation group path) (workstation path) [...] [options]" on page 126
- "workstation-group-create (wgc) (group name) [parent folder] [options]" on page 126
- "workstation-group-members (wgm) [options] (workstation group path)" on page 127
- "workstation-group-remove (wgr) (workstation group path) (workstation path) [...] [options]" on page 127
- "workstation-info (wi) (workstation path)" on page 127
- "workstation-list (wl) [folder] [options]" on page 127
- "workstation-list-bundles (wlb) (workstation object path) [options]" on page 127
- "workstation-list-groups (wlg) (workstation path) [options]" on page 128
- "workstation-list-policies (wlp) (workstation object path) [options]" on page 128
- "workstation-move (wmv) (workstation object path) [destination folder path]" on page 128
- "workstation-refresh (wrf) (workstation object path) [...]
 [options]" on page 128
- "workstation-remove-bundle (wrb) (workstation object path) (bundle or bundle group) [...] [options]" on page 128
- "workstation-remove-policy (wrp) (workstation object path) (policy or policy group) [...] [options]" on page 128
- "workstation-rename (wr) (workstation object path) (new name)" on page 129

- "workstation-reorder-policies (wrop) (workstation object path) (current position) (new position)" on page 129
- ◆ "workstation-retire (wret) (workstation object path)" on page 129
- "workstation-set-as-test (wsat) (workstation object path)" on page 129
- "workstation-set-as-nontest (wsan) (workstation object path)" on page 129
- "workstation-unretire (wuret) (workstation object path)" on page 129
- "workstation-view-all-bundles-status (wvabs) (workstation path) [options]" on page 129
- "workstation-view-all-policies-status (wvaps) (workstation path) [options]" on page 130
- "workstation-wakeup (ww) (workstation object path) [...] [options]" on page 130

workstation-add-bundle (wab) (workstation object path) (bundle or bundle group) [...] [options]

Assigns bundles to a workstation object.

Accepts the following options:

- -f, --folder=[bundle folder] The path of a bundle folder relative to /Bundles. If this option is specified, the path of the bundle objects is determined relative to this folder. This can be used to specify multiple bundle objects under the same folder.
- -I, --icon-location=[application location XML file] XML file that contains the locations to place the icon for the bundle application. For the XML file format, refer to IconLocation.xml located in /opt/novell/zenworks/share/zman/samples/bundles on a Linux server or Installation_directory:\Novell\Zenworks\share\zman\samples\ bundles on a Windows server.
- -d, --distribution-schedule=[distribution schedule XML file] XML file that contains the distribution schedule.
- -l, --launch-schedule=[launch schedule XML file] XML file that contains the launch schedule.
- -a, --availability-schedule=[availability schedule XML file] XML file that contains the availability schedule. For the schedule XML file templates, refer to the XML files located in /opt/novell/zenworks/share/zman/samples/schedules on a Linux server or Installation_directory:\Novell\Zenworks\share\zman\samples\ schedules on a Windows server.
- -b, --install-schedule=[install schedule XML file] XML file that contains the install schedule.
- -i, --install-immediately Installs the bundle immediately after distribution. To use this option, you must also specify the distribution schedule. The distribution schedule can be specified by using the --distribution-schedule, --distribute-now, or --distribute-on-device-refresh option.
- -L, --launch-immediately Launches the bundle immediately after installation. To use this option, you must also specify the distribution schedule. The distribution schedule can be specified by using the --distribution-schedule, --distribute-now, or --distribute-on-device-refresh option.
- -n, --distribute-now Sets the distribution schedule to distribute the bundle immediately. If this option is specified, the --distribution-schedule and --distribute-on-device-refresh options are ignored. The --distribute-now, --distribute-on-device-refresh and --distribution-schedule

options are mutually exclusive and are used to set the distribution schedule. The --distribute-now option is considered first, followed by --distribute-on-device-refresh and --distribution-schedule.

- -r, --distribute-on-device-refresh Sets the distribution schedule to distribute the bundle on device refresh. If this option is specified, the --distribution-schedule option is ignored.
- -s, --launch-on-device-refresh Sets the launch schedule to launch the bundle on device refresh.

 If this option is specified, the --launch-schedule option is ignored.
- -w, --wakeup-device-on-distribution Wakes up the device by using Wake-On-LAN if it is shut down while distributing the bundle. To use this option, you must also specify the Distribution schedule. The Distribution schedule can be specified by using the --distribution-schedule, -- distribute-now, or --distribute-on-device-refresh option.
- -D, --dry-run Tests and displays the requested actions but does not actually perform them.
- -B, --broadcast=[Broadcast address][...] A comma-separated list of addresses used to broadcast the Wake-On-LAN magic packets. This option is used only if you choose to wake up the device by using Wake-On-LAN. A valid IP address is a valid value.
- -S, --server=[Path of the Primary or Proxy Server objects relative to /Devices][...] A comma-separated list of Primary or Proxy Server objects used to wake up the device. This option is used only if you choose to wake up the device by using Wake-On-LAN.
- -C, --retries=[Number of retries] Number of times the Wake-On-LAN magic packets are sent to the device. This option is used only if you choose to wake up the device by using Wake-On-LAN. The value must be between 0 and 5. The default value is 1.
- -T, --timeout=[Time interval between retries] The time interval between two retries. This option is used only if you choose to wake up the device by using Wake-On-LAN. The value must be between 2 and 10 (in minutes). The default value is 2.

workstation-add-policy (wap) (workstation object path) (policy or policy group) [...] [options]

Assigns policies to a workstation object.

Accepts the following options:

- -c, --conflicts=[policy conflict resolution order] Determines how policy conflicts are resolved. Valid values are userlast or 1, devicelast or 2, deviceonly or 3, useronly or 4. For userlast, device-associated policies are applied first, followed by user-associated policies. For devicelast, user-associated policies are applied first, followed by device-associated policies. For deviceonly, user-associated policies are ignored. For useronly, device-associated policies are ignored. If this option is not specified, userlast is taken as the default value.
- -e, --enforce-now Enforces the policy immediately on all assigned devices.
- -f, --folder=[policy folder] The path of a policy folder relative to /Policies. If this option is specified, the path of the policy objects is determined relative to this folder. This can be used to specify multiple policy objects under the same folder.

workstation-copy-relationships (wcr) (workstation path) (workstation object path) [...] [options]

Copies relationships from a selected workstation to other workstations. Workstation relationships include bundle assignments, policy assignments and group memberships if a value is not specified, the assignments are made to the target folders or groups directly.

Accepts the following options:

- -r, --relationship-type: Relationship types to copy. Valid values are bundles, policies and groups. The option bundles will copy all the associated bundle assignments of the source device. The option policies will copy all the associated policy assignments of the source device. The option groups will add target devices as the member of the groups that are associated with the source devices. If a value is not specified, the existing assignments on the target devices are retained.
- -a, --assignment-options: Assignment options. The valid values are assign-to-group-members, assign-to-folder-members and assign-to-folder-members-recursively. The option assign-to-group-members will copy the assignments to members of the target groups. The option assign-to-folder-members will copy the assignments to devices inside the target folder. The option assign-to-folder-members-recursively will copy the assignments to devices inside the target folders and its sub folders.
- -c, --conflict-resolution: Conflict resolution options for existing assignments. The valid values are delete-existing-assignments and replace-existing-assignments. The option delete-existingassignments will delete all the existing assignments of the target devices. The option replaceexisting-assignments will replace the existing assignments of the target devices with the selected assignments. If a value is not specified, the existing assignments on the target devices are retained.
- -g, --group-membership: The group memberships options for the target object type Groups and Folders. The valid values are add-group-members, add-folder-members, add-folder-members-recursively, and delete-existing-group-membership. The option add-group-members will add members of the target group as members of the groups that source device is member of. The option add-folder-members will add devices inside the target folders as members of the groups that the source device is member of. The option add-folder-members-recursively will add devices inside the target folders and its subfolders as members of the groups that source device is member of. The option delete-existing-group-membership will delete the existing group memberships that the target devices are member of.

Examples:

To copy all the relationships of the source workstation to multiple workstations:

zman workstation-copy-relationships workstationfolder/sourceworkstation
--relationship-type=bundles,policies,groups workstationfolder/
workstation workstationfolder/workstationfolderl workstationfolder/
workstationgroup

To copy policy assignments of the source workstation to the workstations inside target workstation folders recursively:

zman wcr workstationfolder/sourceworkstation --relationshiptype=bundlesworkstationfolder1 workstationfolder2 -assignmentoptions=assign-to-group-member,assign-to-folder-members

To replace conflict bundle assignments of the target workstations while copying the assignments from the source workstation:

zman wcr workstationfolder/sourceworkstation -r=policies
workstationfolder/workstation -conflict-resolution=delete-existingassignments

To add workstations of the target workstation groups to the groups of the source workstation:

 ${\tt zman \ wcr \ workstationfolder/sourceworkstation \ -r=groups \ workstationgroup \ group-membership=add-folder-members-recursively}$

zman wcr workstationfolder/sourceworkstation -r=groups workstationgroup
group-membership=add-folder-members-recursively -f -p=C:\temp\
zman wcr workstationfolder/sourceworkstation --relationshiptype=bundlesworkstationfolder1 workstationfolder2 -assignmentoptions=assign-to-group-member,assign-to-folder-members p=C:\temp\copyresult.csv

workstation-delete (wd) workstation object path) [...] [options]

Deletes one or more workstation objects.

(workstation object path) [...] - The path of the workstation objects (workstation, workstation folder or workstation group) relative to /Devices/Workstations. The wildcard * can be used in the object names if it is enclosed in quotations. Exercise caution while using wildcards for deleting objects.

Accepts the following options:

- -r, --recursive Deletes objects inside a folder recursively.
- -f, --folder=[workstation folder] The path of a workstation folder relative to /Devices/ Workstations. If this option is specified, the path of the workstation objects is determined relative to this folder. This can be used to specify multiple workstation objects under the same folder.
- -f, --folder=[workstation folder] The path of a workstation folder relative to /Devices/ Workstations. If this option is specified, the path of the workstation objects is determined relative to this folder. This can be used to specify multiple workstation objects under the same folder.

workstation-folder-create (wfc) (folder name) [parent folder] [options]

Creates a new folder for containing workstations.

Accepts the following option:

--desc=[description] - Description for the folder.

workstation-group-add (wga) (workstation group path) (workstation path) [...] [options]

Adds workstations to a workstation group.

Accepts the following option:

-f, --folder=[workstation folder] - The path of a workstation folder relative to /Devices/ Workstations. If this option is specified, the path of the workstation objects is determined relative to this folder. This can be used to specify multiple workstation objects under the same folder.

workstation-group-create (wgc) (group name) [parent folder] [options]

Creates a workstation group and adds members to it.

Accepts the following options:

--desc=[description] - Description for the group.

- -m, --members=[workstation path][...] The path of the workstations relative to /Devices/ Workstations.
- -f, --folder=[workstation folder] The path of a workstation folder relative to /Devices/ Workstations. If this option is specified, the path of the workstation objects is determined relative to this folder. This can be used to specify multiple workstation objects under the same folder.

workstation-group-members (wgm) [options] (workstation group path)

Lists members of a workstation group or a dynamic workstation group.

Accepts the following option:

-s, --scrollsize=[scrollsize] - Number of results to be displayed at a time.

workstation-group-remove (wgr) (workstation group path) (workstation path) [...] [options]

Removes workstations from a workstation group.

Accepts the following option:

-f, --folder=[workstation folder] - The path of a workstation folder relative to /Devices/ Workstations. If this option is specified, the path of the workstation objects is determined relative to this folder. This can be used to specify multiple workstation objects under the same folder.

workstation-info (wi) (workstation path)

Lists detailed information about a workstation.

workstation-list (wl) [folder] [options]

Lists workstation objects.

Accepts the following options:

- -r, --recursive Lists results recursively including subfolders. If this option is not specified, the contents of the subfolders are not listed.
- -n, --namefilter=[filter string] Displays results matching the specified name. The wildcards * and ? can be used if they are enclosed in quotation marks.
- -t, --typefilter=[type filter][...] Displays results matching the comma-separated list of object types specified. Valid values are device, group, and folder.
- -c, --count Displays the count of the results.
- -s, --scrollsize=[scrollsize] Number of results to be displayed at a time.
- -f, --flagfilter=[flag filter][...] Displays results matching the comma-separated list of flags specified. Valid values are retired, notretired, test, and non-test.

workstation-list-bundles (wlb) (workstation object path) [options]

Lists bundles assigned to a workstation object.

Accepts the following options:

- -a, --all Lists both effective and non-effective bundles.
- -e, --effective Lists only effective bundles.
- -s, --scrollsize=[scrollsize] Number of results to be displayed at a time.

workstation-list-groups (wlg) (workstation path) [options]

Lists groups of which the given workstation is a member.

Accepts the following option:

-s, --scrollsize=[scrollsize] - Number of results to be displayed at a time.

workstation-list-policies (wlp) (workstation object path) [options]

Lists policies assigned to a workstation object.

Accepts the following options:

- -a, --all Lists both effective and non-effective policies.
- -e, --effective Lists only effective policies.
- -s, --scrollsize=[scrollsize] Number of results to be displayed at a time.

workstation-move (wmv) (workstation object path) [destination folder path]

Moves a workstation object to a different folder.

workstation-refresh (wrf) (workstation object path) [...] [options]

Refreshes the ZENworks Agent in the workstations.

Accepts the following option:

- -f, --folder=[workstation folder] The path of a workstation folder relative to /Devices/ Workstations. If this option is specified, the path of the workstation objects is determined relative to this folder. This can be used to specify multiple workstation objects under the same folder.
- --server=<server/server folder/server group object path>[...] The path of Primary Server objects (server, server folder or server group) relative to /Devices/Servers to send Quick Task notifications.
- --notify=<minutes> Time in minutes to notify all devices.
- --expire=<minutes> Time in minutes for expiry after creation of the quick task. Specify 0 to expire immediately.
- --currentserver Add quick task to the current Primary Server.
- --anyserver Add quick task in any of the Primary Servers.
- --expirenever The quick task never expires in the Primary Server.

workstation-remove-bundle (wrb) (workstation object path) (bundle or bundle group) [...] [options]

Removes bundles assigned to a workstation object.

Accepts the following option:

-f, --folder=[bundle folder] - The path of a bundle folder relative to /Bundles. If this option is specified, the path of the bundle objects is determined relative to this folder. This can be used to specify multiple bundle objects under the same folder.

workstation-remove-policy (wrp) (workstation object path) (policy or policy group) [...] [options]

Removes policies assigned to a workstation object.

Accepts the following option:

-f, --folder=[policy folder] - The path of a policy folder relative to /Policies. If this option is specified, the path of the policy objects is determined relative to this folder. This can be used to specify multiple policy objects under the same folder.

workstation-rename (wr) (workstation object path) (new name)

Renames a workstation object.

workstation-reorder-policies (wrop) (workstation object path) (current position) (new position)

Changes the order of policies assigned to a workstation. Use the workstation-list-policies command to get the order of assigned policies.

workstation-retire (wret) (workstation object path)

Retires the selected workstation from your ZENworks system at its next refresh. Retiring a device is different from deleting a device. When you retire a device, its GUID is retained (as opposed to when you delete a device, which also deletes its GUID). As a result, all inventory information is retained and is accessible but all policy and bundle assignments are removed. If you reactivate the device in the future, its assignments are restored.

Accepts the following option:

-i, --immediate - Forces a device refresh to immediately retire the device.

workstation-set-as-test (wsat) (workstation object path)

Sets a workstation as a test device.

Examples

To set workstation1 as a test device:

zman wsat workstation1

workstation-set-as-nontest (wsan) (workstation object path)

Sets a workstation as a non-test device.

Examples

To set workstation1 as a non-test device:

zman wsan workstation1

workstation-unretire (wuret) (workstation object path)

Reactivates the selected workstation at its next refresh and reapplies all policy and bundle assignments that the device previously had.

Accepts the following option:

-i, --immediate - Forces a device refresh to immediately unretire the device.

workstation-view-all-bundles-status (wvabs) (workstation path) [options]

Displays the advanced deployment status of bundles assigned to a workstation.

Accepts the following options:

- --statusfilter=[status type][...] Filter on the status of Bundle Distribution and Install Events. Valid values are S, R, C, A, F, and P (Success, Partial Success, Completed, Partial Complete, Failure, and Pending). A comma-separated list of status types can be given.
- -s, --scrollsize=[scrollsize] Number of results to be displayed at a time.

Examples

To view the deployment status of bundles assigned to workstation1:

```
zman wvabs workstation1
```

To view the deployment status of bundles assigned to workstation1 having bundle deployment status as success or pending:

```
zman wvabs workstation1 --statusfilter S,P
```

workstation-view-all-policies-status (wvaps) (workstation path) [options]

Displays the advanced deployment status of policies assigned to a workstation.

Accepts the following options:

- --statusfilter=[status type][...] Filters on the status of Policy Apply Event. Valid values are S, F, and P (Success, Failure, and Pending). A comma-separated list of status types can be given.
- -s, --scrollsize=[scrollsize] Number of results to be displayed at a time.

workstation-wakeup (ww) (workstation object path) [...] [options]

Wakes up a workstation by using Wake-On-LAN.

Accepts the following options:

- -f, --folder=[workstation folder] The path of a workstation folder relative to /Devices/ Workstations. If this option is specified, the path of the workstation objects is determined relative to this folder. This can be used to specify multiple workstation objects under the same folder.
- -b, --broadcast=[Broadcast address][...] A comma-separated list of addresses used to broadcast the Wake-On-LAN magic packets. This option is used only if you choose to wake up the device by using Wake-On-LAN. A valid IP address is a valid value.
- -s, --server=[Path of the Primary or Proxy Server objects relative to /Devices][...] A comma-separated list of Primary or Proxy Server objects used to wake up the device. This option is used only if you choose to wake up the device by using Wake-On-LAN.
- -C, --retries=[Number of retries] Number of times the Wake-On-LAN magic packets are sent to the device(s). This option is used only if you choose to wake up the device by using Wake-On-LAN. The value must be between 0 and 5. The default value is 1.
- -t, --timeout=[Time interval between retries] The time interval between two retries. This option is used only if you choose to wake up the device by using Wake-On-LAN. The value must be between 2 and 10 (in minutes). The default value is 2.

ZENworks Server Commands

These commands are used to manage servers that have ZENworks installed. ZENworks Server commands begin with zenserver— in the long form, or with the letters zs in the short form.

- "zenserver-backup (zsb) (file path) [Passphrase]" on page 131
- "zenserver-restore (zsr) (file path) [Passphrase]" on page 131

zenserver-backup (zsb) (file path) [Passphrase]

Backs up the configuration files needed to duplicate this server on another ZENworks Server.

(file path) - Path to the file to which the ZENworks Server configuration files are backed up. If the server contains the embedded database, use the database-backup command to back up the database. To restore the server on another server installation, you must first restore the configuration files by using the zenserver-restore command, and then restore the database. The command prompts for a passphrase to encrypt the backed-up file. Make a note of the specified passphrase because you need to enter it for restoring the server.

[Passphrase] - The passphrase to encrypt the backed-up file. The passphrase should be at least 10 characters in length.

```
zenserver-restore (zsr) (file path) [Passphrase]
```

Restores the backed-up configuration files of the crashed ZENworks Server to a new ZENworks Server installation.

(file path) - Path to the file containing the backed-up configuration files to be restored. The server should have the same DNS name and the IP address as the server that is being restored. When the command prompts for a passphrase to decrypt the backed-up file, enter the passphrase that was used to encrypt the files when they were backed up.

[Passphrase] - The passphrase that was used to encrypt the files when they were backed up.

Global Options

The following options can be applied to any zman command:

```
"-h, --help" on page 131

"--usage" on page 131

"--terse" on page 132

"--debug" on page 132

"-V, --verbose" on page 132

"-quiet" on page 132

"-U, --User=<username>" on page 132

"-P, --Password=<password>" on page 132

"--host=<host>" on page 132

"--cleartext" on page 132

"--cleartext" on page 132

"--R, --Redirect=<file path>" on page 132

"-G, --ignore-global-file" on page 132
```

-h, --help

Provides help at various levels. Refer to the Guide to Usage section for more details on using help.

--usage

Displays the syntax of the command.

--terse

Displays terse output.

--debug

Displays debugging output.

-V, --verbose

Enables verbose output.

--quiet

Quiets output, printing only error messages.

-U, --User=<username>

Provides a username. If it is not provided, you are prompted.

-P, --Password=<password>

Specifies a password. If it is not provided, you are prompted.

---host=<host>

Specifies the host name or IP address to connect to (default: localhost).

--port=<port>

Specifies the port that the server is listening on (default: 443).

--cleartext

Disables SSL for debugging purposes. If the port is not set to the clear text port, it connects to port 80 by default.

-R, --Redirect=<file path>

Redirects the output of the screen to a file. Use this option over the command line redirection operator (>) to save data in UTF-8 format and to preserve non-English characters.

-G, --ignore-global-file

Ignore the global options file specified in zman-config.properties.

Security

Running each command requires administrator authorization. To avoid entering administrator credentials for every command, use the admin-store-credential command to store the credentials. The credentials are encrypted and stored in the home folder of the operating system user running the command. The credentials only apply to that logged-on user. It is safer to clear the information by running the admin-clear-credential command after the execution of all the other commands is done.

IMPORTANT: Although command line options for entering usernames and passwords exist, avoid using them. In Linux, they display in the ps listing. In addition, pressing the Up-arrow or Down-arrow keys displays the previous commands entered in both Windows and Linux. Either enter the credentials when prompted or use the admin-store-credential command.

Files

zman-config.properties is a property file used to configure zman and is located in the following locations:

- On Windows: % ZENWORKS_HOME% \conf\zman\properties
- On Linux: /etc/opt/novell/zenworks/zman/properties

The various options available are:

- RENDERER_SCROLLSIZE: Controls the output of a list command globally. Results are retrieved
 and displayed in counts of scroll size specified. This setting can be overridden by using the -scrollsize option in the list commands.
- GLOBAL_OPTIONS_FILE: Global options can be added to every command by storing them in a file and specifying the path of the file as the value to this property. For Windows files, use \\ instead of \. The contents of the file should be in a single line similar to a command.

For example:

```
GLOBAL_OPTIONS_FILE=C:\\zman\\globaloptions.txt
```

Sample content for the file is as follows:

```
--host=123.34.45.56 --port=8080 -cleartext --verbose
```

To bypass the options stored in this file, use the -ignore-global-file option. All the global options except, -U|--User and -P|--Password can be stored in the global options file. The adminstore-credential and admin-clear-credential commands should be used to add administrator credentials to each command. Refer to the Security section for guidelines on using administrator credentials.

- **GLOBAL_OPTIONS_HELP:** Global options for the commands are displayed in the help for every command. To turn off the display of global options, set GLOBAL_OPTIONS_HELP=false.
- **DEBUG_LEVEL:** Controls the volume of debug messages logged into the zman.log file located in *Installation_drive*: \Novell\zenworks\logs in Windows and /var/opt/novell/log/zenworks in Linux. Level 3, which is the default, logs the command entered and exception stack traces if any errors are encountered. Level 4 logs the command entered, the output of the command, and more debug messages.

Exit Codes

zman returns exit codes in the range of 0-255. 0 indicates successful execution of the command; 1-255 indicate an error in execution.

0 - Success.

Exit Codes for Parse Errors:

- 1 An unknown parsing error has occurred.
- 2 A mandatory argument is not specified.
- 3 An unknown flag is specified
- 4 A value is specified for a switch parameter.
- 5 No value is specified for a flagged option.
- 6 An unexpected additional argument is specified.

- 7 An invalid value is specified.
- 8 Unable to convert a value to the type expected.
- 9 Unknown command.
- 10 No options are entered when at least one is required. For example, to modify rights, you must specify at least the Assign option or the Revoke option.

Exit Codes for General Errors:

- 11 An unknown error has occurred.
- 12 The feature is not available because one of the dependent zman jar files is missing.
- 13 Authentication failed.
- 14 An empty string is specified for username or password, or the specified password does not meet the minimum length requirements.
- 15 The ZENworks license has expired.
- 16 Connection failure. The database server might be down.
- 17 The ZENworks administrator does not have sufficient rights to perform this operation.
- 18 Unable to read the certificate for establishing SSL communication.
- 19 This command can be run only on a local host.

Exit Codes for General Object Related Errors:

- 21 The object specified is not of the expected type. For example, a bundle is specified instead of a device.
- 22 The object could not be found.
- 23 An object with the same name already exists in the specified folder.
- 24 The object specified is in a different directory than the specified folder.
- 25 A parent folder cannot be moved into its subfolder.
- 26 The object is not renamable.
- 27 The object is not deletable.
- 28 Attempting to delete a non-empty folder.
- 29 The object is already a member of the group.
- 30 The object is not member of the group.
- 31 The object is already assigned to the device or user.
- 32 The object is not yet assigned to the device or user.
- 33 The object type is invalid to assign to a device or user.
- 34 Assignment of the object to the device is not allowed. For example, the user-specific policy cannot be assigned to a device.

Exit Codes for Other General Errors:

- 41 The specified name is invalid. For example, the object cannot have special characters such as * or % in its name.
- 42 The absolute path starting with a front slash (/) is expected.
- 43 An invalid schedule is specified.
- 44 The XML file did not contain the expected input. For example, an exported action set XML file is given as input when an exported bundle XML file was expected.
- 45 The XML file did not conform to the expected schema.
- 46 An invalid GUID is specified.

- 47 The specified value has exceeded the maximum length.
- 48 A dependent argument has not been specified. For example, the command uses the option to install a bundle immediately on distribution, but does not specify the distribution schedule.

Exit Codes for File Related Errors:

- 61 A directory is expected.
- 62 The file does not exist or is a directory.
- 63 The file already exists
- 64 An error occurred while reading the file.
- 65 An error occurred while writing to the file.
- 66 An error occurred while creating the file.
- 67 An error occurred while creating the directory
- 68 An error occurred while copying the file.
- 69 An error occurred while uploading the file.
- 70 Unable to load the file because there is not sufficient disk space on the target device.

Exit Codes Specific to Registration Commands:

- 71 The folder and the group being associated to the registration key or rule set are not of the same device type.
- 72 A rule set should have at least one rule.

Exit Codes Common to Bundle and Policy Commands:

- 76 Content creation failed.
- 77 Copying the content file to the temporary directory was canceled because a file by that name already exists.
- 78 Creation of a bundle or a policy with file content is being attempted on a server that is not a Content Server.

Exit Codes Specific to Bundle Commands:

- 81 The file specified for the bundle icon is not a valid image file.
- 82 The action set does not contain any actions to reorder, remove, or export.
- 83 The action set does not contain any actions at the given position to reorder, remove, or export.
- 84 The action set is not supported for the bundle type. For example, the Preboot action set is not supported for the Windows bundle.
- 85 The action is not supported for the action set. For example, the Verify Bundle action is not supported for the Install action set.
- 86 The action is non-deletable.
- 87 The action type is singular; you cannot add the same action type more than once to an action set.
- 88 The action type does not support dependent bundles. For example, you cannot specify a dependent bundle path for the Install MSI action.
- 89 The specified dependent bundle path leads to a circular dependency of bundles.
- 90 Failed to create the Wake-On-LAN schedule when assigning bundles.
- 91 Failed to remove the Wake-On-LAN schedule when unassigning bundles.

Exit Codes Common to Device and User Command:

101 - The device or user does not have any bundles or policies associated to it.

Exit Codes Specific to User Commands:

- 106 The User Source Certificate has expired.
- 107 SSL is required to connect to the User Source.

Exit Codes Specific to License Commands:

- 116 Unable to activate the license.
- 118 The server does not have the Certificate Authority role.
- 119 The server does not have the files required to enable the Certificate Authority role.
- 120 The Certificate Authority used is not the ZENworks Internal Certificate Authority.

Exit Codes Specific to Administrator Command:

121 - The right does not belong to the rights category.

Exit Codes Specific to Database Commands:

- 126 The database is not an embedded database.
- 127 The SQL statement is invalid.
- 128 An SQL exception has been encountered.

Exit Codes Specific to Deployment Commands:

- 131 An invalid IP address or hostname has been specified.
- 132 Credentials required to connect to the device are not specified.
- 133 A managed device or a device that has been already scheduled for deployment is specified.

Exit Codes Specific to Report Commands:

- 136 Failed to delete the report.
- 137 Failed to submit a request for the report generation.
- 138 Invalid report document.

ZeUS Commands

The zman zeus command is used to import the latest ZeUS MSIs into the Zone and get the current ZeUS configuration.

```
* "zeus-msi-config | zmc" on page 136
```

- ◆ "zeus-msi-import | zmi (path to ZeUS Msis) [-f|--force]" on page 136
- "zac zeus-refresh / zeus-ref" on page 137

```
zeus-msi-config | zmc
```

Gives the configuration of the last imported ZeUS msi.

```
zeus-msi-import | zmi (path to ZeUS Msis) [-f|--force]
```

Imports the latest ZeUS MSIs into the Zone.

(path to ZeUS Msis) - Provide the full path to the ZeUS directory.

Accepts the following options:

-f, --force - Reimports the MSI even if the versions are the same. This will overwrite the current zeus configuration in the server.

zac zeus-refresh / zeus-ref

Retrieves the system update when it is assigned to a device.

Note: This is not a ZMAN command.

zeninfocollect(1)

Name

zeninfocollect - A utility that lets you gather information to help you resolve problems that might arise when using Micro Focus ZENworks.

Syntax

```
./zeninfocollect.py [options]
```

Description

By default, zeninfocollect gathers cache, server, client, configuration, hardware, and package data as well as log files. The information is packaged into a ZIP file on Windows and a tarball file on Linux, and placed in the location you specify.

By default, the zeninfocollect utility is not installed on any device.

To download and run the zeninfocollect utility on a Windows managed device:

- 1 Copy the ZENworksInfocollect_Win.zip file from the ZENworks_Server\novell\zenworks\install\downloads\tools directory, or download the file from ZENworks Control Center (Configuration tab > Configuration Tasks > Download ZENworks Tools > Administrative Tools).
- **2** Extract the ZENworksInfocollect_Win.zip file on the managed device.
- **3** At the command prompt of the managed device, go to the directory where the .zip contents are extracted and run zeninfocollect.exe [options].

To download and run the zeninfocollect utility on a Linux managed device that has Python installed:

- 1 Copy the ZENworksInfocollect_Linux.zip file from the ZENworks_Server/novell/zenworks/install/downloads/tools directory, or download the file from ZENworks Control Center (Configuration tab > Configuration Tasks > Download ZENworks Tools > Administrative Tools).
- 2 Extract the ZENworksInfocollect_Linux.zip file on the managed device.
- **3** Make the file executable by running the chmod +x zeninfocollect.py command.
- 4 At the command prompt of the managed device, go to directory where the .zip contents are extracted and run ./zeninfocollect.py [options].

List of Options

```
"--output-dir=directory_name" on page 139
"-h, --help" on page 139
"-a, --no-cache" on page 139
"-c, --no-client" on page 139
"-d, --no-hardware" on page 139
```

```
* "-1, --no-logs" on page 139
```

- ◆ "-o, --no-config" on page 139
- "-p, --no-packages" on page 139
- "-s, --no-server" on page 139

--output-dir=directory_name

Specify the directory name that must contain the output archive. If you do not specify a directory, the output is placed in user's temporary directory %TEMP% on a Windows managed device, and /tmp on a Linux managed device.

-h, --help

Display the help information.

-a, --no-cache

Do not collect cache data.

-c, --no-client

Do not collect client data.

-d, --no-hardware

Do not collect hardware data.

-1, --no-logs

Do not collect logs.

-o, --no-config

Do not collect configuration data.

-p, --no-packages

Do not collect package data. Package data includes all version information for packages in the ZENworks Configuration Management package repository.

-s, --no-server

Do not collect server data.

zac for Windows(1)

Name

zac - The command line management interface for the Micro Focus ZENworks Agent that is installed and running on Windows managed devices.

Syntax

```
zac command options
```

Description

The zac utility performs command line management functions on the ZENworks managed device, including installing and removing software bundles, applying policies, and registering and unregistering the device.

Guide to Usage

Most commands have a long form and a short form:

```
• Long form: add-reg-key
```

• Short form: ark

When both forms are available, the command is listed as follows:

```
add-reg-key (ark) arguments
```

When using the command, enter only the long form or the short form:

```
zac add-reg-key arguments
zac ark arguments
```

Arguments can be mandatory or optional. Mandatory arguments are included in angle brackets <argument>. Optional arguments are included in square brackets [argument]. If an argument includes a space, enclose it in quotation marks:

```
zac ark "arg 1"
```

Help Commands

```
• "/h or --help" on page 140
```

```
/h or --help
```

Displays information about the commands.

List of Commands

- "Antimalware Commands" on page 141
- "Authentication Satellite Server Commands" on page 144

- "Satellite Role Commands" on page 145
- "Bundle Commands" on page 145
- "Certificate Commands" on page 147
- "Collection Rollup Commands" on page 147
- "Content Distribution Commands" on page 148
- "Imaging Commands" on page 149
- "Inventory Commands" on page 150
- "Location Commands" on page 150
- "Logging Commands" on page 150
- "OS Target Command" on page 151
- "Patch Management Commands" on page 151
- "Policy Commands" on page 152
- "Registration Commands" on page 152
- "Remote Management Commands" on page 155
- "Status Commands" on page 155
- "System Update Commands" on page 158
- "ZENworks Endpoint Security Management Commands" on page 158

Antimalware Commands

- "malware-agentstatus (mas)" on page 142
- "malware-clearfoldersecurity (mcfs)" on page 142
- "malware-disable-onaccess-scans (mdas)" on page 142
- "malware-enable-onaccess-scans (meas)" on page 142
- "malware-install (mi) [options]" on page 142
- "malware-policy-list (mpl)" on page 142
- "malware-quarantine-delete (mqd) [--f <filename> <fileName> ...][--a <Delete ALL files>]" on page 143
- "malware-quarantine-list (mql) [--filedetails (optional extra details)]" on page 143
- "malware-remove (mr)" on page 143
- "malware-reportstatus (mrs)" on page 143
- "malware-scan (ms)[--full | --quick | --custom <custom policy>]" on page 143
- "malware-scan-restart (msrs)" on page 144
- ◆ "malware-setfoldersecurity (msfs)" on page 144

```
• "malware-support (msp)" on page 144
```

◆ "malware-update (mus) [--signature | --agent])" on page 144

malware-agentstatus (mas)

Gathers the current status of the ZENworks Antimalware Engine for local troubleshooting.

Examples:

```
zac mas
zac malware-agentstatus
```

malware-clearfoldersecurity (mcfs)

Clears the security restriction on the %ZENWORKS_HOME%\\zav\\events folder.

Examples:

```
zac mcfs
zac malware-clearfoldersecurity
```

malware-disable-onaccess-scans (mdas)

Disables on-access scans for the number of minutes specified in the command. If a time is not specified the default is 60 minutes.

Examples:

```
zac mdas
zac mdas --15
zac-disable-onaccess-scans --90
```

malware-enable-onaccess-scans (meas)

Enables on-access scans that are disabled by the malware-disable-onaccess-scans zac command.

NOTE: This command is only an "undo" of the mdas zac command that still has time remaining. This command will not enable on-access scanning if it is disabled in the policy.

Examples:

```
zac meas
zac malware-enable-onaccess-scans
```

malware-install (mi) [options]

Installs the Antimalware engine on this device.

Examples:

```
zac mi
zac malware-install
```

malware-policy-list (mpl)

Lists all assigned Antimalware policies in the zone, to include Antimalware Enforcement, Custom Scan, Network Scan, and Scan Exclusions policies, if applicable.

Examples:

```
zac mpl
zac malware-policy-list
```

malware-quarantine-delete (mqd) [--f <filename> <fileName> ...][--a <Delete ALL files>]

Deletes Antimalware files that are currently in quarantine file. Defaults to deleting all quarantined files.

Examples:

```
zac mqd --f testfile.exe testfile02.bat
zac mqd --a
```

malware-quarantine-list (mql) [--filedetails (optional extra details)]

Lists all quarantined files that have been found from Antimalware scans and ondemand events.

Examples:

```
zac mql
zac mql --filedetails
```

malware-quarantine-restore (mqr) [--f <filename> <filename>...][--r
<restorelocation (Default: Original Path)>][--x <exclude from OnAccess
filescan (1), OnDemand filescan (2), Both (4)>][--k <keepCopyInQuarantine
(Default is false)>][--o <overwrite file if it exists (Default is false)>])

Restores Antimalware quarantined files to specific locations. Defaults to restoring all files to their original locations while overwriting existing files. The command does not keep a copy in quarantine or exclude from all file scans.

Examples:

malware-remove (mr)

Removes the Antimalware engine from this device.

Examples:

```
zac mr
zac malware-remove
```

malware-reportstatus (mrs)

Gathers the current status of the ZENworks Antimalware Engine and reports it to the ZENworks Server.

Examples:

```
zac mrs
zac malware-reportstatus
```

malware-scan (ms)[--full | --quick | --custom <custom policy>]

Scans the device for malware infections using either Full, Quick, Custom, or Network scan.

Examples:

```
zac ms --full
zac ms --quick
zac ms --custom myCustom policyName
zac ms --custom myNetwork policyName
```

malware-scan-restart (msrs)

Restarts scans that were previously aborted.

Examples:

```
zac msrs
zac malware-scan-restart
```

malware-setfoldersecurity (msfs)

Resets the security restriction on the $ZENWORKS_HOME\%\\\zero$ the default setting.

Examples:

```
zac msfs
zac malware-setfoldersecurity
```

malware-support (msp)

Creates an Antimalware (AM) diagnostics package in the %ZENWORKS_HOME%\\zav\\diag folder. This takes several minutes and notifications may be displayed on the device if Agent Notification settings are enabled.

Examples:

```
zac msp
zac malware-support
```

```
malware-update (mus) [--signature | --agent])
```

Updates the ZENworks Antimalware Engine with the latest scan and product definitions.

Examples:

```
zac mus --agent
zac mus --signature
```

Authentication Satellite Server Commands

• "authentication server reconfigure (asr) [-t all|config|casa] [-u username] [-p password]" on page 144

authentication server reconfigure (asr) [-t all|config|casa] [-u username]
[-p password]

Reconfigures an enabled Authentication Satellite.

Examples:

To fetch the configuration files from the server:

```
zac asr -t config
```

To reconfigure the CASA signing certificate:

```
zac asr -t casa
```

To reconfigure the entire Satellite:

```
zac asr -t all -u Administrator -p password
```

If a username and password is required but is not provided on the command line you will be prompted.

Satellite Role Commands

- "satellite server reconfigure (ssr) [-t jetty] [-u username] [-" on page 145
- * "Import-satellite-cert (isc) [-pk <private-key.der>] [-c <signed-server-certificate.der>] [-ca<signing-authority-public-certificate.der>] [-ks <keystore.jks>] [-ksp<keystore-pass-phrase>] [-a <signed-cert-alias>] [-cp<signed-cert-passphrase>] [-u <username>] [-p <password>] [-rc]" on page 145

satellite server reconfigure (ssr) [-t jetty] [-u username] [-

p password]

Reconfigures the Jetty web server.

To reconfigure the Jetty web server:

```
zac ssr -t jetty -u Administrator -p password
```

Import-satellite-cert (isc) [-pk <private-key.der>] [-c <signed-servercertificate.der>] [-ca<signing-authority-public-certificate.der>] [-ks
<keystore.jks>] [-ksp<keystore-pass-phrase>] [-a <signed-cert-alias>] [cp<signed-cert-passphrase>] [-u <username>] [-p <password>] [-rc]

Configures a satellite device with externally signed certificates.

-rc - Confirms reconfiguration of the Satellite Server so that the administrator is not prompted for reconfiguration.

Bundle Commands

- "bundle-install (bin) <bundle display name>" on page 145
- "bundle-launch (bln) <bundle display name> [-noSelfHeal]" on page 146
- "bundle-list (bl)" on page 146
- "bundle-props (bp) <bundle display name>" on page 146
- "bundle-refresh (br) <bundle display name or guid>" on page 146
- "bundle-uninstall (bu) <bundle display name>" on page 146
- "bundle-verify (bv) <bundle display name>" on page 146

bundle-install (bin) <bundle display name>

Installs the specified bundle. Use the bundle-list command to get a list of the available bundles and their display names.

Example:

zac bin bundle1

bundle-launch (bln) <bundle display name> [-noSelfHeal]

Launches the specified bundle. Use the bundle-list command to get a list of the available bundles and their display names.

Example to launch a bundle based on the display name:

```
zac bln bundle1
```

Example to launch a bundle based on the display name and turn selfhealing off if the launch action fails (by default, selfhealing is turned on):

zac bln bundle1 -noSelfHeal

bundle-list (bl)

Displays the list of bundles assigned to the device and the logged in user.

Example:

zac bl

bundle-props (bp) <bundle display name>

Displays the status, version, GUID, and requirements information for the specified bundle. Use the bundle-list command to get a list of the available bundles and their display names.

Example:

zac bln bundle1

bundle-refresh (br) <bundle display name or guid>

Refreshes information about the specified bundle.

Example:

zac br bundle1

bundle-uninstall (bu) <bundle display name>

Uninstalls the specified bundle. Use the bundle-list command to get a list of installed bundles and their display names.

Example:

zac bu bundle1

bundle-verify (bv) <bundle display name>

Verifies an installed bundle (specified by bundle display name) to ensure that no files have been removed or corrupted. Use the bundle-list command to get a list of the installed bundles and their display names.

Example:

zac bv bundle1

Certificate Commands

- "cert-info (ci) [ca certificate file path] [-u <username> -p <password>]" on page 147
- "zac certificate-verify / cv" on page 147

```
cert-info (ci) [ca certificate file path] [-u <username> -p <password>]
```

Lists public key certificate information for each known ZENworks server or adds a trusted root certificate to the device trusted store. The file can be in ASN.1 DER format or base-64 encoded delimited by ----BEGIN CERTIFICATE---- and ----END CERTIFICATE---.

Example:

To list the certificate for each known ZENworks server:

```
zac ci
```

To add a trusted root certificate to the devices trusted store:

```
zac ci c:\certs\mytrustcacert.der -u myuser -p mypassword
```

```
zac certificate-verify / cv
```

Verifies if the server certificate and key file copied to the remint repository are valid and updates the results to the server.

Collection Rollup Commands

- "collection-point (cp)" on page 147
- "collection-upload-orphans (cuo)" on page 147

collection-point (cp)

Shows the status and configuration of the collection role.

Example:

```
collection-point [wake]
```

wake - Wakes the modules that perform collection (Inventory, MD status, Message sender)

```
collection-upload-orphans (cuo)
```

Finds orphaned files on the Satellite device and rolls them up to the parent collection server or deletes them if they have already been rolled up.

This command builds a list of the files in the folders under

%zenworks_home%\work\collection and then tries to find the original upload information for each entry in the collection stats database.

If there is an entry for a file in the database, and it shows that the file has not been rolled up, it rolls the file up. If the entry shows that the file has already been rolled up, it deletes the file on the Satellite device. If there is no entry for a file in the database, the file is rolled up. This command also lists any files that were not uploaded or deleted.

Before running this command, on Linux, you should run the zac crw command and on Windows, the zac cp wake command to send any pending files to the parent server.

Example:

zac cuo

Content Distribution Commands

- "cdp-checksum (cchk) [-1:<path to log>]" on page 148
- "cdp-verify-content (cvc) [-c] [-1:<path to log>]" on page 148
- "cdp-import-content (cic) <content path> [-1:<path to log>]" on page 148
- "wake-cdp (cdp) [cleanup | replicate [content type(s)]]" on page 148

```
cdp-checksum (cchk) [-1:<path to log>]
```

Validates satellite content by computing the checksum on each file.

The optional log file details results of the checksum comparison.

Example:

```
zac cchk -1:"C:\Program Files\Novell\ZENworks\logs\cchk.log"
```

```
cdp-verify-content (cvc) [-c] [-1:<path to log>]
```

Compares the list of content IDs and their sync states on this CDP with what the Primary Server thinks it should have.

You can use the following options:

-c - Computes the checksum on the local content.

Example:

```
zac cvc -1:"C:\Program Files\Novell\ZENworks\logs\cvc.log"
```

```
cdp-import-content (cic) <content path> [-1:<path to log>]
```

Imports missing content from the directory specified by content-path, logging to the file specified by log-path.

Example:

```
zac cic c:\import_source_directory -1:"C:\Program
Files\Novell\ZENworks\logs\cic.log"
```

```
wake-cdp (cdp) [cleanup | replicate [ content type(s)]]
```

Wakes the Content Distribution Point worker thread. You can use either of the following options:

cleanup - Removes any content that should no longer be stored on the Content Distribution Point.

replicate - Downloads any new or changed content from the Content Distribution Point's parent ZENworks Server. One or more content types can be specified. If no content types are specified, all types are replicated.

Examples:

```
zac cdp
zac cdp replicate
zac cdp replicate Windows-Bundle
```

This command is applicable only if the agent is promoted as a Satellite Server.

The content types include:

- Default
- linux-bundle
- Policy
- Macintosh-Bundle
- Patch-Informational-Bundles
- zscm-policy
- subscription-default
- Patch-Critical-Bundles
- Patch-System-Bundles
- subscription-optional
- Patch-Recommended-Bundles
- subscription-recommended
- Imaging
- SystemUpdate-Agent
- Patch-Software-Bundles
- subscription-security
- Windows-Bundle

NOTE: The content types are case-sensitive.

Imaging Commands

```
• "file-system-guid (fsg) [-d] [-r]" on page 149
```

```
file-system-guid (fsg) [-d] [-r]
```

Displays, removes, or restores the workstation GUID in the file system in preparation for taking an image.

For example:

To display the GUID value:

```
zac fsg
```

To remove the GUID and also conninfo.dat from the file system:

```
zac file-system-guid -d
```

To restore the GUID to the file system:

```
zac file-system-guid -r
```

To display the GUID value:

zac fsg

Inventory Commands

```
• "inventory [scannow | cdf | -f scannow]" on page 150
```

inventory [scannow | cdf | -f scannow]

Runs an inventory scan or opens the Collection Data Form.

Example to run an inventory scan:

zac inv scannow

Example to open the Collection Data Form:

zac inv cdf

Example to run a full scan:

zac inv -f scannow

Location Commands

- ◆ "config-location (cl)" on page 150
- "(location preferred protocol communication | lppc) <location name> [options]" on page 150

config-location (cl)

Displays the configuration location. The configuration location determines which ZENworks server (or servers) the device connects to for authentication, configuration, content, and collection purposes.

Examples:

```
zac config-location
zac cl
```

(location preferred protocol communication | lppc) <location name>
[options]

Edits an existing location.

<location name>: Specify a name for the location.

Accepts the following options:

IPv4: Specify IPv4 if you want the devices in this location to try communicating with the servers using IPv4 URLs first before attempting IPv6 URLs.

IPv6: Specify IPv6 if you want the devices in this location to try communicating with the servers using IPv6 URLs first before attempting IPv4 URLs.

Logging Commands

• "logger (log) [resetlog | level [MANAGED|ERROR|WARN|INFO|DEBUG] | managedlevel]" on page 150

```
logger (log) [resetlog | level [MANAGED|ERROR|WARN|INFO|DEBUG] |
managedlevel]
```

Changes or displays the logger configuration for the ZENworks Agent.

You can use the following options:

```
resetlog - Resets the log.
```

level - If this option is used without a level, it displays the current managed logging level. If it is used with one of the levels, changes the logging level to the specified level.

managedlevel - Displays the Global Log level of the zone.

Example to reset the log file:

```
zac logger resetlog
```

Example to show the current log level:

```
zac logger level
```

Example to set the log level to DEBUG and above:

```
zac logger level DEBUG
```

OS Target Command

```
ostarget (os)
```

Displays the ostarget record associated with the workstation OS or a specified version string.

Examples:

To display the version string and corresponding ostarget info for the workstation:

```
zac ostarget
```

To display the corresponding ostarget info for a specific version string:

```
zac ostarget "Windows XP Professional Service Pack 2 (Build 2600)"
```

Patch Management Commands

```
• "patch-scan (ps)" on page 151
```

- "patch-scan --quick (ps --quick)" on page 151
- "patch-scan --complete (ps --complete)" on page 152
- "patch-apply-policy (pap)" on page 152
- "patch-quarantine-release (pqr)" on page 152

patch-scan (ps)

Scans the device for patches that are not applied, using the device's current patch signature (DAU) file. The results are then uploaded to the server.

An example to run a patch scan:

```
zac ps
```

```
patch-scan --quick (ps --quick)
```

Uploads the last scan results to the server; it does not run a new detection scan.

An example to run a quick patch scan:

```
zac ps --quick
```

```
patch-scan --complete (ps --complete)
```

Scans the device for patches that are not applied, using an updated patch signature (DAU) file. The results are then uploaded to the server.

An example to run a complete patch scan:

```
zac ps --complete
```

patch-apply-policy (pap)

Updates devices with the latest version of all patch policies.

An example to run a patch apply policy:

```
zac pap
```

```
patch-quarantine-release (pqr)
```

Releases any quarantined patches on the device where the command is run from quarantine so that a one-time installation attempt can occur, either from a patch policy schedule or a remediation schedule.

An example to run a patch quarantine release:

```
zac pqr
```

Policy Commands

```
• "policy-list (pl)" on page 152
```

```
• "policy-refresh (pr)" on page 152
```

```
policy-list (pl)
```

Lists the policies that are currently being enforced on the device (effective policies). To list all policies (effective and non-effective), use the --all option.

Examples:

```
zac pl
zac pl --all
```

policy-refresh (pr)

Applies all of the policies assigned to the device and user.

Example:

zac pr

Registration Commands

```
"add-reg-key (ark) <registration key>" on page 153
```

- * "reregister (rereg)[-u <username> -p <password>] <new guid>" on
 page 153
- "unregister (unr) [-f] [-s] [-a] [-u <username> -p <password>]" on page 154
- "reestablish-trust (retr) [-u <username> -p <password>]" on page 154

add-reg-key (ark) <registration key>

Registers the device by using the specified key. Registration with keys are additive. If the device has previously been registered with a key and you register it with a new key, the device receives all group assignments associated with both keys.

Example:

```
zac ark key12
```

register (reg) [-g] [-a <authorization key>] [-k <key>] [-u <username> -p
<password] <ZENworks Server address:port>

Registers the device in a Management Zone.

To execute this command you must have **Create/Delete** device rights for the folder that you are attempting to register.

You can use the following options:

- g Lets you create a new device object with a new GUID and password for the device if you have multiple devices with the same GUID. When you register a device by using this switch, all the associations (policies and bundles) assigned to the original device object are removed. You cannot use this option to create a new GUID for a Primary Server or a Satellite device. The local user must have Local Administrator rights to use this option.
- k Lets you register the device using the specified registration key.
- p Lets you specify the Management Zone administrator's password.
- u Lets you specify the Management Zone administrator's username.
- a Lets you specify the authorization key to authorize the device.

Examples:

```
zac reg -k key1 https://123.456.78.90
zac reg -k key1 -u administrator -p novell https://
zenserver.novell.com:8080
```

The port number is required only if the ZENworks Server is not using the standard HTTP port (80). If a username and password are not supplied, you are prompted for them.

reregister (rereg)[-u <username> -p <password>] <new guid>

Registers a device in the current zone and assigns it the GUID of an existing device object. The currently associated device object is deleted.

To execute this command you must have **Create/Delete** device rights for the folder on which you are attempting to reregister.

For example, if you image a device after replacing the hard drive, the device might get a new GUID. However, by using the reregister command, you can assign the device's GUID that it had before you replaced the hard drive.

Examples:

To reregister, specify a username and password:

```
zac reregister -u myuser -p mypassword eaa6a76814d650439c648d597280d5d4 To reregister and be prompted for a username and password:
```

```
zac reregister eaa6a76814d650439c648d597280d5d4
```

NOTE: The -g and -k options will not be honored if the corresponding device object is already present on the server and reconciliation takes place with that device object.

unregister (unr) [-f] [-s] [-a] [-u <username> -p <password>]

Removes the device's registration from the Management Zone.

To execute this command you must have **Create/Delete** device rights for the folder on which you are attempting to unregister.

Example:

To force a device to unregister locally when a server cannot be contacted:

```
zac unr -f -u myuser -p mypassword
```

To unregister locally and suppress prompting for a user name and password:

```
zac unr -s
```

Use –a option to unregister asynchronously. With this option server deletes the device asynchronously.

The -a, -f, -u, and -p parameters are optional. If you don't use the -u and -p parameters, you are prompted to enter a username and password. The -f parameter ignores the ZENworks database and forces the device to be unregistered locally; this option is necessary only if the device object has already been deleted from the ZENworks database or if the device cannot connect to the database. If -a option is specified, ZENworks server returns the unregister call quickly, but deletes the device object asynchronously from the database at a later point of time. If your device deletion is not complete and tries to register the device again, then the ZENworks server displays an error. If there is large amount of data associated with the device in the database, it might take long time to delete the device. Ensure that -a option is used when actual device deletion on server takes long time and causes the agent unregister command to timeout.

NOTE: Running the UNR command might cause high utilization of the database. This might be due to any of the following reasons:

- The UNR command is running on the server.
- The zone contains a large number of managed devices.
- The managed devices have a huge history.
- Patch Management is enabled.

reestablish-trust (retr) [-u <username> -p <password>]

Reestablishes trust with the current Management Zone. The username and password used must be of the Zone Administrator.

Example:

```
zac retr -u myuser -p mypassword
```

The -u and -p parameters are optional. If you don't use the -u and -p parameters, you are prompted to enter a username and password.

Remote Management Commands

request-remote-session, rrs

Requests a remote management session from the managed device even in the absence of the Zicon. This command is available on managed devices with 11.3.1 and later versions.

Examples:

```
zac request-remote-session
zac rrs
```

Status Commands

- "cache-clear (cc)" on page 155
- "dump-prop-pages (dpp) <target directory>" on page 156
- "get-settings (gs) <key>" on page 156
- "refresh (ref)[general | partial bundle <Bundle Display Name>
 [bypasscache]" on page 156
- "set-proxy (sp) [options] <IP address/Hostname:port>" on page 156
- "winproxy-refresh (wpr)" on page 157
- "zenhttp-status(zhs)" on page 157
- "info-collect (zeninfo) [<targetfile>] [-q]" on page 157
- "zone-config (zc) [-1]" on page 157
- "statussender (sts)" on page 158

cache-clear (cc)

Clears the ZENworks cache on the device. This removes all entries in the cache database and deletes any cache files associated with those entries.

Example:

zac cc

NOTE: If your ZENworks administrator has enabled the self defense feature for the ZENworks Agent, you must supply an override password before running the zac cc command. Otherwise, you receive the following message:

You do not have permission to clear the cache. Please contact your ZENworks administrator.

You must request the override password from your ZENworks administrator. If he has not set an override password, he must do so before you can use the command. After you receive the password:

- 1. Double-click the ZENworks icon (z-icon) in the system tray, click Agent (under Status), then click the Policy Override link in the Agent Security Settings section to display the About box.
- 2. Click Override Policy, enter the override password, then click Override.

- 3. Go to a command line prompt and run the zac cc command.
- 4. After the cache is successfully cleared, return to the About box and click **Load Policy** to disable the password override.

dump-prop-pages (dpp) <target directory>

Outputs the HTML pages displayed in the ZENworks icon's property pages to files in the specified target directory.

Example:

```
zac dpp c:\temp
```

get-settings (gs) <key>

Settings are downloaded by the Settings Module to the local cache on every refresh. This will return the effective settings associated with the given key.

Example:

```
zac gs key1
```

All valid ZENworks settings keys are stored in the %ZENWORKS_HOME%\cache\zmd\settings directory.

Example to list the Remote Management settings:

```
zac gs RemoteManagement
```

refresh (ref)[general | partial bundle <Bundle Display Name> [bypasscache]

Initiates a general refresh to refresh all bundles, policies, registration, and configuration settings; initiates a partial refresh to refresh all policies, registration, and configuration settings.

Use bypasscache to avoid using data from the server cache during the refresh. This option is useful for testing or troubleshooting.

Examples:

```
zac ref general bypasscache
zac ref partial bypasscache
```

set-proxy (sp) [options] <IP address/Hostname:port>

Specifies a proxy to contact rather than contacting a ZENworks Server directly.

The options are:

- --default Sets a proxy that can be overriden by proxy settings from the Management Zone.
- --clear Clears the current proxy, but will use proxy settings from the Management Zone.
- --ipv6 sets an IPv6 proxy.

Examples:

IPv4:

```
zac sp 123.456.78.90:2349 administrator novell
zac sp /default 123.456.78.90:2349
zac sp /clear
IPv6:
zac sp /ipv6 [2001:db8:0:1:1:1:1]:2349 administrator novell
```

```
zac sp /default /ipv6 [2001:db8:0:1:1:1:1:1]:2349
zac sp /clear /ipv6
```

If a username and password is not specified, then you will be prompted to enter them.

winproxy-refresh (wpr)

Queries the Management Zone for proxy work assigned to this device.

Example:

zac wpr

zenhttp-status(zhs)

Lists port and tags for registered handlers.

Example:

zac zhs

This command is applicable only if the agent is promoted as a satellite.

info-collect (zeninfo) [<targetfile>] [-q]

Collects ZENworks support information, including cache data, configuration data, debug logs, product installation information, refresh times, status events, and basic system information. The information is packaged into a ZIP file and placed in the location you specify. If you do not specify a location, \${TEMP}\zeninfo-\${DateTime}.zip is used for Windows and \${TMPDIR}\zeninfo-\${DateTime}.zip is used for Linux. If you are experiencing problems with a managed device, Micro Focus Support might ask you to run this command and send the resulting ZIP file to Micro Focus to help troubleshoot your problem.

You can use the following option:

q - Skip launching explorer after collection.

The zeninfo command can be run by the local administrators. If you are not a local administrator and you run the command, the system prompts you to enter the administrator credentials. You can also set the AllowZenInfoWithoutAdminPwd string value to True, which enables any user to run the zeninfo command. To set the AllowZenInfoWithoutAdminPwd string value, do the following:

- 1. Open the Registry Editor.
- 2. Go to HKLM\Software\Novell\ZCM\.
- 3. Set the AllowZenInfoWithoutAdminPwd string value to True.

WARNING: If the AllowZenInfoWithoutAdminPwd string value is set to True, the sensitive ZENworks Configuration Management settings and configuration information is visible also to the users who are not the local administrators.

zone-config (zc) [-1]

Displays information about the ZENworks Server that the device is accessing for configuration information (the Configuration server) or lists the information for the Configuration server.

Examples:

```
zac zc
zac zc -l
```

statussender (sts)

This command rolls up status information to the Primary Server. You can either roll up information that was updated since the last time the status was rolled-up or you can roll up the complete status information.

Examples:

To roll up status information that was updated since the last successful status roll up:

```
zac sts rollup
```

To roll up status information on the same thread

```
zac sts rollup syn
```

To roll up complete status information:

```
zac sts rollup full
```

NOTE: From the ZENworks 2020 release onwards, the zac bsr command has been deprecated. Execute the zac sts command to roll up bundle status information.

System Update Commands

```
zac zeus-refresh / zeus-ref
```

Retrieves the system update when it is assigned to a device.

```
zac system-update-report-status / surs
```

Enables administrators to resend the system update status to the server immediately.

ZENworks Endpoint Security Management Commands

```
zac zesm-refresh / zesm-ref
```

Resets the ZENworks Endpoint Security Management cache on the managed devices.

zac for Linux(1)

Name

zac - The command line management interface for the Micro Focus ZENworks Agent that is installed and running on Linux managed devices.

Syntax

```
zac command options
```

Description

The zac utility performs command line management functions on the ZENworks managed device, including installing and removing software bundles, applying policies, and registering and unregistering the device.

Guide to Usage

This section contains a guide to general command formatting and conventions.

Most commands have a long form and a short form:

```
Long form: add-reg-key
```

Short form: ark

When both forms are available, the command is listed as follows:

```
add-reg-key (ark) options
```

When using the command, enter only the long form or the short form:

```
zac add-reg-key options
zac ark options
```

If an option includes a space, enclose it in quotation marks:

```
zac ark "option 1"
```

Mandatory and Optional arguments

Arguments enclosed inside parentheses () are mandatory and those enclosed by square brackets [] are optional.

Ellipsis (...)

An ellipsis indicates that a command accepts multiple entries of the last argument type. The arguments must be separated by space or commas, depending on the command. For example:

```
zac <command> [options] (server) (bundle) [...]
```

The ellipsis indicates that <command> can accept multiple bundles. In the command level help, the multiple entry argument help is given as [(bundle) (bundle) ... (bundle)] for more clarity.

Help Commands

```
• "/? or --help" on page 160
```

◆ "COMMAND /?" on page 160

• "/g or --group" on page 160

```
/? or --help
```

Displays help for the system.

COMMAND /?

Displays the description for a specified command.

```
/g or --group
```

Displays commands of the specified group.

List of Commands

- "Authentication Satellite Server Commands" on page 161
- "Bundle Commands" on page 161
- "Certificate Commands" on page 165
- "Collection Rollup Commands" on page 165
- "Content Distribution Commands" on page 166
- "Core Commands" on page 168
- "System Update Commands" on page 170
- "External Service Commands" on page 170
- "Imaging Commands" on page 171
- "Inventory Commands" on page 172
- "Inventory-Only Commands" on page 172
- "Local User Management Commands" on page 172
- "Location Commands" on page 174
- "Logging Commands" on page 175
- "Package Management Commands" on page 176
- "Patch Management Commands" on page 181
- "Policy Commands" on page 181
- "Registration Commands" on page 182
- "Satellite Role Commands" on page 184
- "Status Commands" on page 185

Authentication Satellite Server Commands

- "authentication server reconfigure (asr) [-t all|config|casa] [-u username] [-p password]" on page 161
- * "import-authentication-cert(iac)[-pk <private-key.der>] [-c <signed-server-certificate.der>] [-ca <signing-authority-public-certificate.der>] [-ks <keystore.jks>] [-ksp <keystore-pass-phrase>] [-a <signed-cert-alias>] [-ks <signed-cert-passphrase>] [-u username] [-p password] [-rc]" on page 161

authentication server reconfigure (asr) [-t all|config|casa] [-u username]
[-p password]

Reconfigures an enabled Authentication Satellite.

Examples:

To fetch the configuration files from the server:

```
zac asr -t config
```

To reconfigure the CASA signing certificate:

```
zac asr -t casa
```

To reconfigure the entire Satellite:

```
zac asr -t all -u Administrator -p password
```

If a username and password is required but is not provided on the command line you will be prompted.

import-authentication-cert(iac)[-pk <private-key.der>] [-c <signed-servercertificate.der>] [-ca <signing-authority-public-certificate.der>] [-ks
<keystore.jks>] [-ksp <keystore-pass-phrase>] [-a <signed-cert-alias>] [ks <signed-cert-passphrase>] [-u username] [-p password] [-rc]

Configures an Authentication Satellite device with externally signed certificates.

rc - Confirms reconfiguration of the Authentication Satellite Server so that the administrator is not prompted for reconfiguration.

Each Satellite must have its own individual server certificate and private key. For more information about generating external certificates, see the ZENworks Server Installation.

Bundle Commands

- "bundle-install (bin) [options] [bundlename | GUID | Pattern]" on page 162
- "bundle-launch (bln) [bundle display name] [-noSelfHeal]" on page 162
- "bundle-list (bl) [options]" on page 162
- "bundle-lock-add (bla) [options] [bundlename] [...]" on page 163
- "bundle-lock-list (bll)" on page 163
- "bundle-lock-remove (blr) [options] [bundleindex] [...]" on page 163
- "bundle-refresh (br) [bundle display name | guid]" on page 164

- "bundle-search (bse) [options] pattern" on page 164
- "bundle-uninstall (bu) [bundle display name | guid]" on page 164
- "bundle-verify (bv) [bundle display name]" on page 164

bundle-install (bin) [options] [bundlename | GUID | Pattern]

Installs the specified bundles based on the display name that match the specified regular expression or string, or the bundle GUID. Use the bundle-list command to get a list of the available bundles and their display names.

The following regular expressions are supported:

Regular Expression	Functionality
^abc	Matches string starting with 'abc'.
[abc]	Matches string containing 'a', 'b', or 'c'.
a*c	Matches zero or more times 'a' followed by 'c', 'ac', 'aac', 'aaac', or 'c'.

Accepts the following option:

-N, --dryrun - Tests and displays but does not actually perform the requested action. You can perform a dry run on a bundle version only once. This option is applicable only for the Install RPM actions of the bundle.

An example to install a bundle based on the bundle name:

zac bin bundle1

bundle-launch (bln) [bundle display name] [-noSelfHeal]

Launches the specified bundle. The actions in the Launch Action set are executed.

If you try to launch a bundle that is not installed, the bundle is first installed and then launched.

Use the bundle-list command to get a list of the available bundles and their display names.

An example to launch a bundle based on the display name:

zac bln bundle1

Example to launch a bundle based on the display name and to turn self-healing off if the launch action fails (by default, selfhealing is turned on):

zac bln bundle1 -noSelfHeal

bundle-list (bl) [options]

Displays the list of bundles assigned to the device and the logged-in user.

The output of this command is displayed in columns and provide the details of every bundle assigned or available for the managed device. The Display Name, Version, and Bundle Type columns represent the bundle display name, the version number of the bundle or sandbox if the bundle is a sandbox version, and the bundle type, respectively. The Status column displays the following states:

Available: Displays this state if the bundle is installed.

Not Installed: Displays this state if the particular bundle version is not installed.

Downloaded: Displays this state if the contents are downloaded but the action in the Install Action set have not been executed.

This command accepts the following options:

- -a, --all Lists both the filtered and non-filtered bundles. Filtered bundles are chain bundles. By default, the non-filtered bundles are displayed.
- -g, --show-guid Displays the bundle GUID.

An example to list all the bundles:

zac bl -a

bundle-lock-add (bla) [options] [bundlename] [...]

Locks the specified bundles that match the specified regular expression or string from being upgraded or removed.

The following regular expressions are supported:

Regular Expression	Functionality
^abc	Matches string starting with 'abc'.
[abc]	Matches string containing 'a', 'b', or 'c'.
a*c	Matches zero or more times 'a' followed by 'c', 'ac', 'aac', 'aaac', or 'c'.

Accepts the following options:

-li, --lock-install - Locks the bundle and prevents the installation of the bundle that is specified in the lock.

NOTE: Bundle locks are applicable only for Install action set.

-t, --type - Specify the bundle type to be locked. The available types are linux and patch. If no type is specified, the type, bundle, is selected.

bundle-lock-list (bll)

Lists the bundle locks. The bundle locks are sorted by ID number.

Example:

zac bll

bundle-lock-remove (blr) [options] [bundleindex] [...]

Removes the bundle lock that you specify by its number. You can find the number for each lock by using the bundle-lock-list (bll) command.

Accepts the following options:

- -n Removes the specified bundle locks by name. Ensure that the name does not contain any patterns.
- --remove-all Removes all bundle locks.

An example to remove a bundle lock abc:

zac blr -n abc

An example to remove all bundle locks:

zac blr --remove-all

bundle-refresh (br) [bundle display name | guid]

Refreshes information about the specified bundle.

Example:

zac br bundle1

bundle-search (bse) [options] pattern

Searches for bundles that match the specified regular expression or string.

The following regular expressions are supported:

Regular Expression	Functionality
a+bc	Matches one or more times 'a' followed by 'bc'.
	For example, matches one or more times 'a' followed by 'abc' or 'aabc'.
[a-z]*	Matches the empty string and strings with names containing only alphabetic characters.
	For example, matches the empty string "", or strings with names such as acb and xyz with only alphabetic characters.
a*bc	Matches zero or more times 'a' followed by 'bc'.
	For example, matches zero or more times 'a' followed by 'abc', 'aabc', 'aaabc', or 'bc'.

The output of this command is similar to the output of the zac bl command.

Accepts the following option:

-i, --installed-only - Searches only the list of installed bundles.

bundle-uninstall (bu) [bundle display name | guid]

Uninstalls the specified bundle. The actions that support the Undo action are executed while uninstalling the bundle. After the bundle uninstall is complete, the bundle state is displayed as Not Installed.

Use the bundle-list command to get a list of the installed bundles and their display names.

Example:

zac bu bundle1

bundle-verify (bv) [bundle display name]

Reinstalls the bundle and executes the Verify Action sets to ensure that no files have been removed or corrupted. Use the bundle-list command to get a list of the installed bundles and their display names.

Example:

zac bv bundle1

Certificate Commands

- "zac certificate-verify / cv" on page 165

```
cert-info (ci) [ca certificate file path] [-u <username> -p <password>]
```

Lists public key certificate information for each known ZENworks server or adds a trusted root certificate to the device trusted store. The file can be in ASN.1 DER format or base-64 encoded delimited by ----BEGIN CERTIFICATE---- and ----END CERTIFICATE---.

Example:

To list the certificate for each known ZENworks server:

```
zac ci
```

To add a trusted root certificate to the devices trusted store:

```
zac ci c:\certs\mytrustcacert.der -u myuser -p mypassword
```

```
zac certificate-verify / cv
```

Verifies if the server certificate and key file copied to the remint repository are valid and updates the results to the server.

Collection Rollup Commands

- "collection-clients (crc)" on page 165
- "collection-point (cp)" on page 165
- "collection-queued (crq)" on page 165
- "collection-state (crs)" on page 166
- "collection-upload-orphans (cuo)" on page 166
- "collection-wake (crw)" on page 166

collection-clients (crc)

Displays devices that have uploaded files to this Collection.

Example:

zac crc

collection-point (cp)

Shows the status and configuration of the collection role.

Example:

```
collection-point [wake]
```

wake - Wakes the modules that perform collection (Inventory, MD status, Message sender)

collection-queued (crq)

Displays collected files that have not yet been rolled up.

Example:

zac crq

collection-state (crs)

Displays the current state of the Satellite Collection role.

Example:

zac crs

collection-upload-orphans (cuo)

Finds orphaned files on the Satellite device and rolls them up to the parent collection server or deletes them if they have already been rolled up.

This command builds a list of the files in the folders under /var/opt/novell/zenworks/work/collection (except for the collectionStatsDB folder) and then tries to find the original upload information for each entry in the collection stats database.

If there is an entry for a file in the database, and it shows that the file has not been rolled up, it rolls the file up. If the entry shows that the file has already been rolled up, it deletes the file on the Satellite device. If there is no entry for a file in the database, the file is rolled up. This command also lists any files that were not uploaded or deleted.

Before running this command, you should run the $zac\ crw$ command to send any pending files to the parent server.

Example:

zac cuo

collection-wake (crw)

Sends collected files to the parent server.

Example:

zac crw

Content Distribution Commands

- "cdp-checksum (cchk) [-1:<path to log>]" on page 166
- "cdp-verify-content (cvc) [-c] [-1:<path to log>]" on page 167
- "cdp-import-content (cic) <content path> [<path to log>]" on page 167
- "distribution-info (cdi) [option]" on page 167
- ◆ "distribution-state (cds)" on page 167
- "distribution-wake (cdp) [cleanup | replicate [content type(s)]]" on page 167

cdp-checksum (cchk) [-1:<path to log>]

Validates satellite content by computing the checksum on each file.

The optional log file details results of the checksum comparison.

Example:

zac cchk -1:"/var/opt/novell/zenworks/logs/cchk.log"

cdp-verify-content (cvc) [-c] [-1:<path to log>]

Compares the list of content IDs and their sync states on this CDP with what the Primary Servers thinks it should have.

You can use the following options:

c - Computes the checksum on the local content.

Example:

```
zac cvc -1:"/var/opt/novell/zenworks/logs/cvc.log"
```

cdp-import-content (cic) <content path> [<path to log>]

Imports missing content from the directory specified by content-path, logging to the file specified by log-path.

Example:

```
zac cic /usr/content_Dir /var/opt/novell/zenworks/logs/cic.log
```

distribution-info (cdi) [option]

Displays statistical information about the Content role. You can use the following options:

```
all - Executes all options marked with *.
```

ss - Shows sync status *.

rs - Gets the Content Repository size *.

da - Lists devices that have retrieved data from this device *.

ne - Gets the number of content distribution errors *.

ds - Gets the size of data served by this device *.

fs - Gets the number of files served *.

ah [n] - Displays n (default all) entries from the access history.

ch - Clears the history.

eh <file> - Exports the access history to <file>, where the path is included and the file itself must not exist.

Examples:

```
zac cdi
```

zac cdi rs

distribution-state (cds)

Displays the state of the Satellite Content role. Displays if the role is enabled/disabled, the status (Starting, Active, Stopping, Stopped), the Parent URLs, and the replication schedule.

Example:

zac cds

distribution-wake (cdp) [cleanup | replicate [content type(s)]]

Wakes the Content Distribution Point worker thread. You can use either of the following options:

cleanup - Removes any content that should no longer be stored on the Content Distribution Point.

replicate - Downloads any new or changed content from the Content Distribution Point's parent ZENworks Server. One or more content types can be specified. If no content types are specified, all types will be replicated.

Examples:

```
zac cdp
zac cdp replicate
zac cdp linux-bundle
```

This command is applicable only if the agent is promoted as a Satellite Server.

The content types include:

- Default
- linux-bundle
- Policy
- Macintosh-Bundle
- Patch-Informational-Bundles
- zscm-policy
- subscription-default
- Patch-Critical-Bundles
- Patch-System-Bundles
- subscription-optional
- Patch-Recommended-Bundles
- subscription-recommended
- Imaging
- SystemUpdate-Agent
- Patch-Software-Bundles
- subscription-security
- Windows-Bundle

NOTE: The content types are case-sensitive.

Core Commands

- "get-settings (gs) <key>" on page 168
- "get-pref (get) <preference name>" on page 169
- "set-proxy (sp) [options] <IP address/Hostname:port>" on page 169

get-settings (gs) <key>

Settings are downloaded by the Settings Module to the local cache on every refresh. This will return the effective settings associated with the given key.

Example:

```
zac gs key1
```

Example to list the Remote Management settings:

```
zac gs RemoteManagement
```

All the valid ZENworks settings keys are stored in the /var/opt/novell/zenworks/zmd/cache/settings/directory.

get-pref (get) <preference name>

Displays the preferences that are currently set.

Example to display all preferences that are set:

```
zac get-pref
```

Example to display all preferences that have names beginning with abc:

```
zac get-pref abc
```

set-pref (set) <preference name> <preference value>

Sets the value for a preference.

Example to set the value of preference abc to 123:

```
zac set-pref abc 123
```

NOTE: If you want to configure a proxy server for a managed device, ensure that the managed device has both the proxy-host and proxy-port preferences configured. If the proxy server requires authentication, the managed device must additionally have the proxy-username and proxy-password preferences configured.

set-proxy (sp) [options] <IP address/Hostname:port>

Specifies a proxy to contact rather than contacting a ZENworks Server directly.

The options are:

- --default Sets a proxy that can be overriden by proxy settings from the Management Zone.
- --clear Clears the current proxy, but will use proxy settings from the Management Zone.
- --ipv6 sets an IPv6 proxy.

Examples:

IPv4:

```
zac sp 123.456.78.90:2349 administrator novell
zac sp /default 123.456.78.90:2349
zac sp /clear
```

IPv6:

```
zac sp /ipv6 [2001:db8:0:1:1:1:1:1]:2349 administrator novell
zac sp /default /ipv6 [2001:db8:0:1:1:1:1:1]:2349
zac sp /clear /ipv6
```

If a username and password is not specified, then you will be prompted to enter them.

System Update Commands

- "zac zeus-refresh / zeus-ref" on page 170
- "zac system-update-report-status / surs" on page 170

zac zeus-refresh / zeus-ref

Retrieves the system update when it is assigned to a device.

```
zac system-update-report-status / surs
```

Enables administrators to resend the system update status to the server immediately.

External Service Commands

These commands are used to manage external services.

- "external-service-add (esa) --type (type) (url) (Service Name) [Properties]" on page 170
- "external-service-delete (esd) (index | name | url | --all)" on page 171
- ◆ "external-service-list (esl)" on page 171
- "external-service-refresh (esr) (index | name | url | --all)" on page 171
- "external-service-state (ess) (enable | disable) (index | name | url | --all)" on page 171
- "external-service-types (est)" on page 171

external-service-add (esa) --type (type) (url) (Service Name) [Properties]

Adds external package repositories like YUM, ZYPP, or the Local directory that contains the RPMs. All the type-specific properties should start with -D.

You can list the service types that you can add by using the zac est command.

It supports the following types:

- YUM: Adds repository of type YUM. Accepts the following properties:
 - -Dusername=value -Dpassword=value This property is optional and is used while adding an authenticated YUM repository.
 - -DsyncExternal=true This property is optional and is used to synchronize with the Local Package Management tool.

For example, run the following command to add a YUM service type:

```
zac esa --type YUM -Dusername=username -Dpassword=passwd https://
nu.novell.com/sles11 sles11-yum-repo
```

- ZYPP: Adds repository of type ZYPP. Accepts the following properties:
 - -DsyncExternal=true This property is optional and is used to synchronize with the Local Package Management tool.

For example, run the following command to add a ZYPP service type:

```
zac esa --type ZYPP http://zypp.source.com/sles11/x86_64 sles11-
zypp-repo
```

- Mount: Adds a repository of type Mount. A Mount type adds a service from the Local directory that contains the RPMs. Accepts the following properties:
 - -Drecursive=(Value) This property is optional. The valid values are true or false. If true, the RPMs are added recursively from all the directories under the specified absolute path.
 - -DsyncExternal=true This property is optional and is used to synchronize with the Local Package Management tool.

For example, run the following command to add packages recursively from all directories by using the Mount service type:

```
zac esa --type mount -Drecursive=true file:///mnt/sles11-cd/i586
sles11-rpms
```

NOTE: The ZYPP or Mount services do not synchronize with the YUM Package Management Tool on Red Hat devices.

```
external-service-delete (esd) (index | name | url | --all)
```

Removes the specified external services.

The --all option deletes all the external services.

```
external-service-list (esl)
```

Lists all the external services.

The Source column displays the ZENworks Agents that were added by using the zac command and displays the ZENworks Server that was added through an External Service Policy.

The Status column displays whether the external service is active or inactive. You cannot refresh the external services that display their status as Inactive.

The State column displays whether the external service is enabled or disabled.

```
external-service-refresh (esr) (index | name | url | --all)
```

Refreshes the specified external services.

The --all option refreshes all the services.

```
external-service-state (ess) (enable | disable) (index | name | url | --
all)
```

Enables or disables the specified external services.

The --all option changes the service state of all the services.

```
external-service-types (est)
```

Lists the available service types.

Imaging Commands

```
• "file-system-guid (fsg) [-d] [-r]" on page 171
```

```
file-system-guid (fsg) [-d] [-r]
```

Removes and restores the workstation GUID in the file system in preparation for taking an image.

Example to remove the GUID from the file system:

```
zac file-system-guid -d
Example to restore the GUID to the file system:
zac file-system-guid -r
Example to print the GUID value:
zac fsg
```

Inventory Commands

• "inventory (inv) [scannow | cdf]" on page 172

```
inventory (inv) [scannow | cdf]
```

Runs an inventory scan or opens the Collection Data Form.

Example to run an inventory scan:

```
zac inv scannow
```

Example to open the Collection Data Form:

zac inv cdf

Inventory-Only Commands

These commands are used only for Inventory-Only (IOA) agents.

```
zac ioa cfg <server ip>
```

Configures the Linux IOA device to the mentioned server ip.

```
zac ioa cfg <ip_address>
```

zac ioa version

Displays the version of the Inventory-Only (IOA) agent.

inventory (inv) [scannow]

Runs an inventory scan.

An example to run an inventory scan:

zac inv scannow

Local User Management Commands

These commands are used to manage local users and their privileges.

```
• "user-add (ua) (username)" on page 173
```

- "user-delete (ud) (username)" on page 173
- "user-list (ul)" on page 173
- "user-edit (ue) (username) [+/-Privilege]" on page 173
- "user-privilege-export (upe) (.xml filename)" on page 174
- "user-privilege-import (upi) (.xml filename)" on page 174

user-add (ua) (username)

Adds a local user to the ZENworks privilege store.

Example:

```
zac ua username
```

user-delete (ud) (username)

Deletes a local user from the ZENworks privilege store.

Example:

zac ud username

user-list (ul)

Lists the following:

- User names and privileges for the local users added to the ZENworks privilege store.
- Privileges for the local users not added to the ZENworks privilege store (default user). The default user is represented by * (asterisk).

Example:

zac ul

user-edit (ue) (username) [+/-Privilege]

Edits the local user privileges. You use + (plus) to add a new privilege and - (minus) to remove an existing privilege.

By default, a newly created local user has the View privilege. The local users that are not added to the ZENworks privilege store inherit the privilege assigned to the default user that is represented by * (asterisk). You can change the privileges assigned to any local user and assign the user the following privileges:

Privilege	Functionality
View	View or list the information on bundles, policies, configuration, and so on.
Install	Install or uninstall bundles, policies, packages, and so on.
Configure	Run the configuration commands.
SuperUser	Execute all the zac commands because a SuperUser is assigned all the privileges. By default, the root user is assigned the SuperUser privilege, which cannot be modified.

Examples:

If you want to allow the local users in the ZENworks privilege store to view, install, and uninstall bundles and policies, you can assign the View and Install privileges to these users by running the following command:

```
zac ue username +Install
```

If you want to allow the local users that are not added to the ZENworks privilege store to view, install, and uninstall bundles and policies, you can assign the View and Install privileges to to the * user by running the following command:

```
zac ue '*' +Install
```

```
user-privilege-export (upe) (.xml filename)
```

Exports a list of local users and their privileges to a specified .xml file for reusing this list on other managed devices.

Example:

```
zac upe /tmp/privileges.xml
```

After exporting the list, you can import it to other managed devices by running the user-privilege-import (upi) command.

```
user-privilege-import (upi) (.xml filename)
```

Imports a list of local users and their privileges to other managed devices from a specified .xml file. This list can be exported to the .xml file by running the user-privilege-export (upe) command.

Example:

```
zac upi /tmp/privileges.xml
```

Location Commands

- "config-location (cl)" on page 174
- "location-create (lc) (location name) [-d|--desc=<description>] [network environment name] [...]" on page 174
- "location preferred protocol communication | lppc <location name> [options]" on page 175

config-location (cl)

Displays the configuration location. The configuration location determines which ZENworks server (or servers) the device connects to for authentication, configuration, content, and collection purposes.

Examples:

```
zac config-location
zac cl
```

location-create (lc) (location name) [-d|--desc=<description>] [network environment name] [...]

Creates a location and (optionally) assigns network environments to the location.

(location name) - The name you want assigned to the new location.

[network environment name] - The name of an existing network environment that you want to assign to the location. You can add multiple network environments. Adding network environments during creation of a location is optional. You can use the location-nwenv-assign command to add network environments after creation.

[network environment name] - The name of an existing network environment that you want to assign to the location. You can add multiple network environments. Adding network environments during creation of a location is optional. You can use the location-nwenv-assign command to add network environments after creation.

Accepts the following options:

-d |--desc=description: Specify a description for the location.

- -t | -- downloadThrottle=Download Throttle rate: Specify a download throttle rate.
- -u | -- uploadThrottle=Upload Throttle rate Specify an upload throttle rate.
- -a | -- auditUpload=Audit upload data Specify 0 to enable or 1 to disable the audit upload data.
- **-e | -- Preferred protocol for communication** Based on your preferred protocol for communication, specify either IPv4 or IPv6.

Specify IPv4 if you want the devices in this location to try communicating with the servers using IPv4 URLs first before attempting IPv6 URLs.

Specify IPv6 if you want the devices in this location to try communicating with the servers using IPv6 URLs first before attempting IPv4 URLs.

- **C** | -- cifsServer=CIFS Server: Specify a CIFS server that allows you to provide share access.
- -i | --proxyAddress=IPv4 HTTP Proxy Address Specify an IPv4 proxy address.
- -p | --proxyPort= IPv4 HTTP Proxy Port: Specify the port number on which the proxy server should listen.
- -r | --proxyCidr=IPv4 HTTP Proxy CIDR: Specify the range of IPv4 address using CIDR notation.
- -x | --ipv6ProxyAddress=IPv6 HTTP Proxy Address Specify an IPv6 proxy address
- -y -ipv6ProxyPort=IPv6 HTTP Proxy Port: Specify the port number on which the proxy server should listen.
- -z | -- ipv6ProxyCidr=IPv6 HTTP Proxy CIDR: Specify the range of IPv6 address using CIDR notation.

location preferred protocol communication | lppc <location name> [options] Edits an existing location.

<location name>: Specify a name for the location.

Accepts the following options:

IPv4: Specify IPv4 if you want the devices in this location to try communicating with the servers using IPv4 URLs first before attempting IPv6 URLs.

IPv6: Specify IPv6 if you want the devices in this location to try communicating with the servers using IPv6 URLs first before attempting IPv4 URLs.

Logging Commands

• "logger [resetlog | level [MANAGED|ERROR|WARN|INFO|DEBUG] | managedlevel]" on page 175

logger [resetlog | level [MANAGED | ERROR | WARN | INFO | DEBUG] | managedlevel]

Changes the logger configuration.

You can use the following options:

resetlog - Resets the log.

level - If used without a level, displays the current managed logging level. If used with one of the levels, changes the logging level to the specified level.

managedlevel - Displays the Global Log level of the zone.

Example to reset the log file:

```
zac logger resetlog
Example to show the current log level:
zac logger level
Example to set the log level to DEBUG and above:
zac logger level DEBUG
```

Package Management Commands

- "checkpoint-add (cpa) (name) [date]" on page 176
- "checkpoints-list" on page 176
- "checkpoint-remove (cpr) (name) [...]" on page 176
- "dist-upgrade (dup) [options] [bundle name|service name] [...]" on page 176
- "info (info) [option] pattern" on page 177
- "install (in) [options] (package name) [...]" on page 177
- "list-updates (lu) [options] [bundle name | service name] [...]" on page 178
- "lock-add (la) (name or pattern)[version]" on page 178
- "lock-delete (ld) (lock number) [...]" on page 179
- "lock-list (ll)" on page 179
- "packagehistory (ph) [options] [...]" on page 179
- "remove (rm) [options] (package name) [...]" on page 179
- "rollback (ro) [options] [date or check point]" on page 179
- "search (se) [options] [pattern]" on page 180
- "update (up) [options] [bundle name|service name] [...]" on page 180
- "what-provides (wp) pattern" on page 180
- "what-requires (wr) pattern" on page 180

```
checkpoint-add (cpa) (name) [date]
```

Adds a checkpoint. If the date is not specified, adds a check point with the current date.

checkpoints-list

Lists the saved checkpoints.

```
checkpoint-remove (cpr) (name) [...]
```

Removes the specified checkpoints.

```
dist-upgrade (dup) [options] [bundle name|service name] [...]
```

Performs a distribution upgrade. This command performs an update of all packages with a special resolver algorithm which takes care of package architecture change, package splits, pattern and product updates, etc. If no arguments are provided, packages from all ZENworks bundles and external services are considered for distribution upgrade.

Accepts the following options:

- -d, --download-only Only downloads packages.
- -N, --dry-run Tests and displays the requested actions but does not actually perform them.
- -y, --no-confirm Does not prompt for confirmation.

For example, you can upgrade the distribution from SLES 10 SP2 to SLES 10 SP3.

info (info) [option] pattern

Displays package information for the specified package that matches the specified pattern. The following regular expressions are supported:

Regular Expression	Functionality
^abc	Matches string starting with 'abc'.
[abc]	Matches string containing 'a', 'b', or 'c'.
a*c	Matches zero or more times 'a' followed by 'c', 'ac', 'aac', 'aaac', or 'c'.

The command displays the Name, Version, Architecture, and Description of the packages. Accepts the following options:

- --provides Lists packages and files that is provided by the package that matches the specified pattern.
- --requires Lists packages and files that is required by the package that matches the specified pattern.

install (in) [options] (package name) [...]

Installs the specified packages. If you specify a package with a version, the exact version of the package is installed. If you specify a package with a name, the best version of the package is installed.

NOTE: If you want to downgrade a package, specify the version to which you want to downgrade the package.

Accepts the following options:

- -b, --bundle [bundle name] Installs a package from the specified bundle. The bundle that you specify can also be a Linux Dependency Bundle. However, to install a Linux Dependency Bundle, the Publish Packages should be set to True. For more information on Publish Packages, see Creating Linux Dependency Bundles.
- -d, --download-only Downloads packages to the zen cache directory. By default, the zen cache directory is located in /var/opt/novell/zenworks/zmd/cache.
- -N, --dry-run Tests and displays the requested actions but does not actually perform them.
- -y, --no-confirm Does not prompt for confirmation.
- -f, --freshen Installs packages only if an earlier version of the package exists.
- -s, --service [service name] Installs a package from the specified service.
- -p, --pattern [pattern name] Installs a package of a specified pattern. However, only the mandatory packages part of the pattern is installed.
- --entire-bundle [bundle name] [...] Installs all packages from the specified bundles. You can specify a single bundle or multiple bundles.

- --ignore-dependency Does not check for dependency. The dependant packages are skipped and only the packages are installed.
- -r, --regex-pattern <regex pattern> [<regex pattern>]- Installs all the packages that match the specified regular expression.

The following regular expressions are supported:

Regular Expression	Functionality
^abc	Matches string starting with 'abc'.
[abc]	Matches string containing 'a', 'b', or 'c'.
a*c	Matches zero or more times 'a' followed by 'c', 'ac', 'aac', 'aaac', or 'c'.

Additionally, the command also lists the dependent packages to successfully complete the installation.

list-updates (lu) [options] [bundle name|service name] [...]

Displays available updates in the specified bundles and services. You can specify a single bundle or service, or multiple bundles or services for which you want to display the updates. If no bundle or service is specified, the command displays all the available updates.

Accepts the following option:

-t, --type [type] - Lists updates from the specified service type.

lock-add (la) (name or pattern)[version]

Adds a package lock rule. This command locks the specified packages, which if they match the specified regular expression or string, are not upgraded or removed. The package name can be specified individually, with wildcard patterns, or even with version number relations. The version number should be specified within single or double quotes.

Relational Operator	Functionality
=	Locks only the specific package version.
<	Locks all versions of the package older than the specified version, excluding the specified version.
>	Locks all versions of the package later than the specified version, excluding the specified version.
<=	Locks all versions of the package older than the specified version, as well as the specified version.
>=	Locks all versions of the package later than the specified version, as well as the specified version.

If you want to install a specific version of the package, this command first checks if the package version has been locked, then installs the package version only if it is not locked. For example, assume that all the later versions of the package "X 1.7" have been locked by using the zac la X '>' 1.7 command. If you try to install the X 1.9 package by using the zac in X (1.9) command, the installation fails.

lock-delete (ld) (lock number) [...]

Deletes the package lock that you specify by its number. You can find the number for each lock with the lock-list (11) command.

lock-list (11)

Lists the package locks.

packagehistory (ph) [options] [...]

Lists package transaction history that is performed by using ZENworks. This command displays the package name, date, operation, version, and release.

Accepts the following option flags:

- -n, --search-name [package name] Searches by package name
- -a, --search-action [action name] Searches by action name. The valid action names are None, Install, Removal, and Upgrade.
- -d, --days-back [days] Maximum number of days to look back (default 30).
- -c, --clean-history Cleans package history.
- -o, --search-operation [operation] Searches based on the operation performed. The operation performed can be Install, Removal, or Upgrade.

remove (rm) [options] (package name) [...]

Removes the specified packages.

Accepts the following options:

- --entire-bundle [bundle name] Removes all the packages from the specified bundle.
- -N, --dry-run Tests and displays but does not actually perform the requested actions.
- -y, --no-confirm Does not prompt for confirmation.
- -r, --regex-pattern <regex pattern> [<regex pattern>] Removes all the packages matching the specified regular expression.

The following regular expressions are supported:

Regular Expression	Functionality
^abc	Matches string starting with 'abc'.
[abc]	Matches string containing 'a', 'b', or 'c'.
a*c	Matches zero or more times 'a' followed by 'c', 'ac', 'aac', 'aaac', or 'c'.

Additionally, this command also lists the dependent packages to successfully complete the removal of the specified package.

rollback (ro) [options] [date or check point]

Rolls back package transactions to the time and date you specify, if the rollback preference is set. By default, the rollback preference is disabled. You can enable the rollback preference by running the zac set rollback true command.

If you want to roll back to a particular version of the package, that version of the package and its dependencies should be available as part of the service or the assigned bundle. If the version of the package or its dependencies is not available, the rollback fails.

Additionally, this command also lists the dependent packages that are required to successfully roll back.

Accepts the following options:

- -d, --download-only Only downloads packages.
- -N, --dry-run Tests and displays but does not actually perform the requested actions.
- -y, --no-confirm Does not prompt for confirmation.
- -p, --package (package name) Name of the package that needs to be rolled back.

search (se) [options] [pattern]

Searches for packages that match the specified pattern. If no arguments are provided, it displays all the packages. This command displays the source name, source type, package name, version, and architecture.

Accepts the following options:

- -b, --bundle [bundle name] Searches packages in the specified bundle.
- -d, --search-in-description Searches in package descriptions but not package names.
- -i, --installed-only Shows only installed packages.
- -u, --uninstalled-only Shows only uninstalled packages.
- -s, --service [service name] Searches packages in the specified service.
- -t, --type [service type] Searches packages, based on the specified service type.
- -p, --pattern [pattern name] Shows the available patterns.
- --sort-by-bundle Sort packages by bundle, not by name. Default sorting is by package name.
- --show-nevra Shows the NEVRA details of the packages.

update (up) [options] [bundle name | service name] [...]

Updates the installed packages. You can specify a single bundle or service name, or multiple bundles or service names, for which to update the packages. If no bundle or service name is specified, all the packages are updated.

If there are installed packages that have the same name and architecture but different versions, only packages with the higher version are upgraded.

Accepts the following options:

- -d, --download-only Only downloads packages.
- -N, --dry-run Tests and displays but does not actually perform the requested actions.
- -y, ---no-confirm Does not prompt for confirmation.
- -t, --type [service-type] Updates packages from the specified external service type.

what-provides (wp) pattern

Displays packages that provide the library, program, or package that matches the specified pattern. Only the * wildcard pattern is supported.

Example to display the packages ending with a:

zac wp *a

what-requires (wr) pattern

Lists packages that require the library, program, or package that matches the specified pattern.

An example to display packages starting with a:

```
zac wr a*
```

Patch Management Commands

```
• "patch-scan (ps)" on page 181
```

- "patch-scan --quick (ps --quick)" on page 181
- "patch-scan --complete (ps --complete)" on page 181
- "patch-apply-policy (pap)" on page 181
- "patch-quarantine-release (pqr)" on page 181

patch-scan (ps)

Scans the device for patches that are not applied, using the device's current patch signature (DAU) file. The results are then uploaded to the server.

An example to run a patch scan:

```
zac ps
```

```
patch-scan --quick (ps --quick)
```

Uploads the last scan results to the server; it does not run a new detection scan.

An example to run a quick patch scan:

```
zac ps --quick
```

```
patch-scan --complete (ps --complete)
```

Scans the device for patches that are not applied, using an updated patch signature (DAU) file. The results are then uploaded to the server.

An example to run a complete patch scan:

```
zac ps --complete
```

```
patch-apply-policy (pap)
```

Updates devices with the latest version of all patch policies.

An example to run a patch apply policy:

```
zac pap
```

```
patch-quarantine-release (pqr)
```

Releases any quarantined patches on the device where the command is run from quarantine so that a one-time installation attempt can occur, either from a patch policy schedule or a remediation schedule.

An example to run a patch quarantine release:

```
zac pq
```

Policy Commands

- "policy-list (pl)" on page 182
- "policy-refresh (pr)" on page 182

```
policy-list (pl)
```

Lists the policies that are currently being enforced on the device (effective policies). To list all policies (effective and non-effective), use the --all option.

Examples:

```
zac pl
zac pl --all
```

policy-refresh (pr)

Applies all of the policies assigned to the device and user.

Example:

zac pr

Registration Commands

- "add-reg-key (ark) <registration key>" on page 182
- "register (reg) [-k <key>] [-u <username> -p <password] <ZENworks Server address:port>" on page 182
- * "reregister (rereg)[-u <username> -p <password>] <new guid>" on page 183
- "unregister (unr) [-f] [-s] [-a] [-u <username> -p <password>]" on page 183
- ◆ "reestablish-trust (retr) [-u <username> -p <password>]" on page 183

add-reg-key (ark) <registration key>

Registers the device by using the specified key. Registration with keys is additive. If the device has previously been registered with a key and you register it with a new key, the device receives all group assignments associated with both keys.

Example:

```
zac ark key12
```

register (reg) [-k <key>] [-u <username> -p <password] <ZENworks Server address:port>

Registers the device in a Management Zone. To execute this command you must have Create/ Delete device rights for the folder that you are attempting to register.

Examples:

```
zac reg -k key1 https://123.456.78.90
zac reg -k key1 https://zenserver.novell.com:8080
```

The port number is required only if the ZENworks Server is not using the standard HTTP port (80). If a username and password are not supplied, you are prompted for them.

NOTE: The -k option will not be honored if the corresponding device object is already present on the server and reconciliation takes place with that device object.

reregister (rereg)[-u <username> -p <password>] <new guid>

Registers a device in the current zone and assigns it the GUID of an existing device object. The currently associated device object is deleted. To execute this command you must have Create/Delete device rights for the folder you are attempting to reregister.

For example, if you image a device after replacing the hard drive, the device might get a new GUID. However, by using the reregister command, you can assign the same GUID that it had before you replaced the hard drive.

Examples:

To reregister, specify a username and password:

zac reregister -u myuser -p mypassword eaa6a76814d650439c648d597280d5d4
To reregister and be prompted for a username and password:

zac reregister eaa6a76814d650439c648d597280d5d4

unregister (unr) [-f] [-s] [-a] [-u <username> -p <password>]

Removes the device's registration from the Management Zone. To execute this command you must have Create/Delete device rights for the folder you are attempting to unregister.

Example:

To force a device to unregister locally when a server cannot be contacted:

```
zac unr -f -u myuser -p mypassword
```

To unregister locally and suppress prompting for a user name and password:

```
zac unr -s
```

Use –a option to unregister asynchronously. With this option server deletes the device asynchronously.

The -a, -f, -u, and -p parameters are optional. If you don't use the -u and -p parameters, you are prompted to enter a username and password. If -a option is specified, ZENworks server returns the unregister call quickly, but deletes the device object asynchronously from the database at a later point of time. If your device deletion is not complete and tries to register the device again, then the ZENworks server displays an error. If there is large amount of data associated with the device in the database, it might take long time to delete the device. Ensure that -a option is used when actual device deletion on server takes long time and causes the agent unregister command to timeout.

NOTE: Running the UNR command might cause high utilization of the database. This might be due to any of the following reasons:

- The UNR command is running on the server.
- The zone contains a large number of managed devices.
- The managed devices have a huge history.
- Patch Management is enabled.

reestablish-trust (retr) [-u <username> -p <password>]

Reestablishes trust with the current Management Zone. The username and password used must be of the Zone Administrator.

Example:

```
zac retr -u myuser -p mypassword
```

The -u and -p parameters are optional. If you don't use the -u and -p parameters, you are prompted to enter a username and password.

Satellite Role Commands

- "remint-satellite-cert (rsc)" on page 184
- "satellite-cachecfg (satcfg)" on page 184
- "satellite-clearcache (satcc)" on page 184
- "satellite-refreshcfg (satrc)" on page 184
- "satellite-roles (satr)" on page 184
- "imgsatserver status (iss status)" on page 184

remint-satellite-cert (rsc)

Remints the SSL certificate for Satellite Servers and reconfigures the Jetty web server.

```
Example: zac rsc
```

satellite-cachecfg (satcfg)

Reads Satellite roles from cache.

Example:

zac satcfg

satellite-clearcache (satcc)

Clears Satellite configuration information from cache.

Example:

zac satcc

satellite-refreshcfg (satrc)

Refreshes Satellite roles.

Example:

zac satrc

satellite-roles (satr)

Reports on current Satellite roles and their state.

Example:

zac satr

imgsatserver status (iss status)

Displays the device's imaging role properties, including its current status, PXE service status, image files, and imaging statistics.

Current Status: Displays whether your device is currently configured to perform Imaging operations. The current status is **Active** when the device is promoted to a satellite with the Imaging role.

PXE Service Status: Displays whether the Proxy DHCP service is enabled on the device.

PXE Requests: The number of imaging requests of any kind that have been received by the Imaging Server since it was last started. This includes requests that failed, were denied, or were referred to other Imaging Servers. Information about each of these requests, such as the source, type, date/time, and results, is logged on the Imaging Server.

Images Sent: The number of images that the Imaging Server has sent to imaging clients since the Imaging Server was last started. This includes only images that were retrieved from this Imaging Server.

Images Received: The number of new images that have been received and stored on the Imaging Server since it was last started. This includes images that were received through client referrals.

Example:

zac iss status

Status Commands

```
• "agent-properties (agp)" on page 185
```

```
• "cache-clear (cc)" on page 185
```

- "info-collect (zeninfo) [<targetfile>]" on page 186
- "refresh (ref)[general [bypasscache] | partial [bypasscache] | bypasscache]" on page 186
- "zenhttp-status(zhs)" on page 186
- "zone-config (zc)" on page 186
- "get-settings (gs) <key>" on page 186
- "statussender (sts)" on page 187

agent-properties (agp)

Provides information about the ZENworks Agent. The following fields provide information about the ZENworks Agent:

Device Address. The IP address of your device.

Device Name. The computer name for your device.

Device State. The state of the device - Managed, Unmanaged, Retired, or Unknown. The Unknown state is displayed only if there is an error.

Last Contact With Server. The last time the ZENworks Agent contacted the ZENworks Server.

Next Contact With Server. The time scheduled for the ZENworks Agent to contact the ZENworks Server.

Primary User. The currently logged in user.

Example:

```
zac agp
zac agent-properties
```

cache-clear (cc)

Clears the ZENworks cache on the device. This removes all entries in the cache database and deletes any cache files associated with those entries.

Example:

zac cc

info-collect (zeninfo) [<targetfile>]

Collects ZENworks support information, including cache data, configuration data, debug logs, product installation information, refresh times, status events, and basic system information. The information is packaged into a ZIP file and placed in the location you specify. If you do not specify a location, \${TMPDIR}\zeninfo-\${DateTime}.zip is used. If you are experiencing problems with a managed device, Micro Focus Support might ask you to run this command and send the resulting ZIP file to Micro Focus to help troubleshoot your problem.

To run the zeninfo process in the background, run the following command.

```
zac zeninfo /tmp/zeninfo/ & echo $! > /tmp/zeninfo/zeninfo.pid
```

To stop the zeninfo process, run the following command:

kill `cat /tmp/zeninfo/zacinfo.pid`

refresh (ref)[general [bypasscache] | partial [bypasscache] | bypasscache]

Initiates a general refresh to refresh all registration and configuration settings; or initiates a partial refresh to refresh all registration and configuration settings.

Use bypasscache to avoid using data from the server cache during the refresh. This option is useful for testing or troubleshooting.

Examples:

```
zac ref general bypasscache
zac ref partial bypasscache
zac ref bypasscache
```

zenhttp-status(zhs)

Lists port and tags for registered handlers.

Example:

zac zhs

zone-config (zc)

Displays information about the ZENworks Server that the device is accessing for configuration information (the Configuration server) or lists the information for the Configuration server.

Examples:

zac zc

get-settings (gs) <key>

Settings are downloaded by the Settings Module to the local cache on every refresh. This will return the effective settings associated with the given key.

Example:

```
zac gs key1
```

All valid ZENworks settings keys are stored in the $\var/opt/novell/zenworks/cache/zmd/settings$ directory.

Example to list the Remote Management settings:

zac gs RemoteManagement

statussender (sts)

This command rolls up status information to the Primary Server. You can either roll up information that was updated since the last time the status was rolled-up or you can roll up the complete status information.

Examples:

To roll up status information that was updated since the last successful status roll up:

zac sts rollup

To roll up complete status information:

zac sts rollup full

zac for Macintosh(1)

Name

zac - The command line management interface for the Micro Focus ZENworks Agent that is installed and running on Macintosh managed devices.

Syntax

```
zac command options
```

Description

The zac utility performs command line management functions on the ZENworks managed device, including installing and removing software bundles, applying policies, and registering and unregistering the device.

Guide to Usage

This section contains a guide to general command formatting and conventions.

Most commands have a long form and a short form:

```
Long form: add-reg-key
```

Short form: ark

When both forms are available, the command is listed as follows:

```
add-reg-key (ark) options
```

When using the command, enter only the long form or the short form:

```
zac add-reg-key options
zac ark options
```

If an option includes a space, enclose it in quotation marks:

```
zac ark "option 1"
```

Mandatory and Optional arguments

Arguments enclosed inside parentheses () are mandatory and those enclosed by square brackets [] are optional.

Ellipsis (...)

An ellipsis indicates that a command accepts multiple entries of the last argument type. The arguments must be separated by space or commas, depending on the command. For example:

```
zman server-add-bundle [options] (server) (bundle) [...]
```

The ellipsis indicates that server-add-bundle can accept multiple bundles. In the command level help, the multiple entry argument help is given as [(bundle) (bundle) ... (bundle)] for more clarity.

List of Commands

- "Bundle Commands" on page 189
- "Core Commands" on page 191
- "Inventory Commands" on page 195
- "Inventory-Only Commands" on page 195
- "Patch Management Commands" on page 195
- "Satellite Roles Commands" on page 196
- "Status Commands" on page 197
- "System Update Commands" on page 197
- "ZENworks Certificate Commands" on page 197

Bundle Commands

- "bundle-install (bin)" on page 189
- "bundle-launch (bln)" on page 189
- "bundle-list (bl)" on page 189
- ◆ "bundle-lock-add (bla) [options] [bundlename] [...]" on page 190
- "bundle-lock-list (bll)" on page 190
- "bundle-lock-remove (blr)" on page 190
- "bundle-props (bp)" on page 190
- "bundle-refresh (br)" on page 190
- "bundle-search (bse)" on page 190
- "bundle-uninstall (bu)" on page 191
- "bundle-verify (bv)" on page 191

bundle-install (bin)

Installs the specified bundles based on the display name that match the specified regular expression or string, or the bundle GUID.

Use the bundle-list command to get a list of the available bundles and their display names.

An example to install a bundle:

```
zac bin MacBundle
```

bundle-launch (bln)

Launches the specified bundle. The actions in the Launch Action set are executed. If you try to launch a bundle that is not installed, the bundle is first installed and then launched.

Use the bundle-list command to get a list of the available bundles and their display names.

An example to launch a bundle based on the display name:

```
zac bln MacBundle
```

bundle-list (bl)

Displays the list of bundles assigned to the device and the logged-in user.

The output of this command is displayed in columns and provide the details of every bundle assigned or available for the managed device. The Display Name, Version, and Bundle Type columns represent the bundle display name, the version number of the bundle or sandbox if the bundle is a sandbox version, and the bundle type, respectively.

The Status column displays the following states:

Available: Displays this state if the bundle is installed.

Not Installed: Displays this state if the particular bundle version is not installed.

Downloaded: Displays this state if the contents are downloaded but the action in the Install Action set have not been executed.

An example to list all the bundles:

zac bl

bundle-lock-add (bla) [options] [bundlename] [...]

Locks the specified bundles that match the specified regular expression or string from being upgraded or removed.

Bundle locks are applicable only for Install action set.

Accepts the following options:

- -li, --lock-install Locks the bundle and prevents the installation of the bundle that is specified in the lock.
- -t, --type Specify the bundle type to be locked. The available types are **MAC** and **Patch**. If no type is specified, the type, bundle, is selected.

bundle-lock-list (bll)

Lists the bundle locks. The bundle locks are sorted by ID number.

An example to list the locked bundles:

zac bll

bundle-lock-remove (blr)

Removes the bundle lock that you specify by its number. You can find the number for each lock by using the bundle-lock-list command.

An example to remove all bundle locks:

```
zac blr --remove-all
```

bundle-props (bp)

Returns property information for a bundle.

An example to get the bundle properties of a specified bundle:

```
zac bp MacBundle
```

bundle-refresh (br)

Refreshes information about the specified bundle.

An example to refresh a bundle:

```
zac br MacBundle
```

bundle-search (bse)

Searches for bundles matching the specified java regular expression or string.

bundle-uninstall (bu)

Uninstalls the specified bundle. The actions that support the **Undo** action are executed while uninstalling the bundle. After the bundle uninstall is complete, the bundle state is displayed as Not Installed.

Use the bundle-list command to get a list of the installed bundles and their display names.

An example to uninstall a bundle:

zac bu MacBundle

bundle-verify (bv)

Reinstalls the bundle and executes the Verify action sets to ensure that no files have been removed or corrupted. Use the bundle-list command to get a list of the installed bundles and their display names.

An example to verify a bundle:

zac by MacBundle

Core Commands

```
• "add-reg-key (ark)" on page 191
```

- "agent-properties (agp)" on page 192
- "cache-clear (cc)" on page 192
- ◆ "cert-info (ci)" on page 192
- "config-location (cl)" on page 192
- "file-system-guid (fsg)" on page 192
- "get-pref (get)" on page 192
- "get-settings (gs)" on page 192
- "logger [resetlog | level [MANAGED|ERROR|WARN|INFO|DEBUG] | managedlevel]" on page 193
- "reestablish-trust (retr)" on page 193
- "refresh (ref)[general | partial bundle <Bundle Display Name>
 [bypasscache]" on page 193
- "register (reg)" on page 193
- "reregister (rereg)" on page 194
- "set-pref (set)" on page 194
- "set-proxy (sp) [options] <IP address/Hostname:port>" on page 194
- "unregister (unr)" on page 194
- "zone-config (zc)" on page 195

add-reg-key (ark)

This command registers a device by using the specified registration key.

Example: zac add-reg-key

agent-properties (agp)

This command provides information about the ZENworks Agent.

```
Example: zac agent-properties
```

cache-clear (cc)

Clears the cache on this device.

Example: zac cc

cert-info (ci)

Lists public key certificate information for each known ZCM server or adds a trusted root certificate to the machine store.

Example:

To list the certificate for each known ZENworks user:

zac ci

To add a trusted root certificate to the devices trusted store:

```
zac ci <location> -u myuser -p mypassword
```

config-location (cl)

Displays the current location.

Example:

zac config-location

file-system-guid (fsg)

Removes and restores the workstation GUID in the file system in preparation for taking an image.

Example:

To display the GUID value:

zac fsg

To remove the GUID and also conninfo.dat from the file system:

```
zac file-system-quid -d
```

To restore the GUID to the file system:

```
zac file-system-guid -r
```

Do not specify an option to print the the GUID value:

zac fsg

get-pref (get)

Displays the preferences that are currently set.

Example to display all preferences that have names beginning with abc:

```
zac get-pref abc
```

get-settings (gs)

Settings are downloaded by the Settings Module to the local cache on every refresh. This will return the effective settings associated with the given key.

Example:

```
zac gs key1
```

You can also use the get-settings (gs) command to list settings using various keys. For more information, see get-settings (gs) <key> in the Status Commands section.

logger [resetlog | level [MANAGED|ERROR|WARN|INFO|DEBUG] | managedlevel]

Changes the logger configuration.

You can use the following options:

```
resetlog - Resets the log.
```

level - If used without a level, displays the current managed logging level. If used with one of the levels, changes the logging level to the specified level.

managedlevel - Displays the Global Log level of the zone.

Example to reset the log file:

```
zac logger resetlog
```

Example to show the current log level:

```
zac logger level
```

Example to set the log level to DEBUG and above:

```
zac logger level DEBUG
```

reestablish-trust (retr)

This command re-establishes trust with the current zone.

Reestablishes trust with the current Management Zone. The username and password used must be of the Zone Administrator.

Example:

```
zac retr -u myuser -p mypassword
```

The -u and -p parameters are optional. If you don't use the -u and -p parameters, you are prompted to enter a username and password.

refresh (ref)[general | partial bundle <Bundle Display Name> [bypasscache]

Initiates a general refresh to refresh all bundles, policies, registration, and configuration settings; initiates a partial refresh to refresh all policies, registration, and configuration settings.

Use bypasscache to avoid using data from the server cache during the refresh. This option is useful for testing or troubleshooting.

Examples:

```
zac ref general bypasscache
zac ref partial bypasscache
```

register (reg)

This command registers a device to a specified zone.

To execute this command you must have **Create/Delete** device rights for the folder on which you are attempting to register.

Example:

```
zac reg -k key1 https://123.456.78.90
```

reregister (rereg)

This command registers a device in the current zone and assigns it to the GUID of an existing device object. The currently associated device object is deleted. To execute this command you must have Create/Delete device rights for the folder on which you are attempting to reregister.

To reregister, specify a username and password:

```
zac reregister -u myuser -p mypassword eaa6a76814d650439c648d597280d5d4
```

set-pref (set)

Sets the value for a preference.

Example to set the value of preference abc to 123:

```
zac set-pref abc 123
```

set-proxy (sp) [options] <IP address/Hostname:port>

Specifies a proxy to contact rather than contacting a ZENworks Server directly.

The options are:

- --default Sets a proxy that can be overriden by proxy settings from the Management Zone.
- --clear Clears the current proxy, but will use proxy settings from the Management Zone.
- --ipv6 sets an IPv6 proxy.

Examples:

IPv4:

```
zac sp 123.456.78.90:2349 administrator novell
zac sp /default 123.456.78.90:2349
zac sp /clear
```

IPv6:

```
zac sp /ipv6 [2001:db8:0:1:1:1:1:1]:2349 administrator novell
```

If a username and password is not specified, then you will be prompted to enter them.

unregister (unr)

This command unregisters a device from the current zone.

To execute this command you must have **Create/Delete** device rights for the folder on which you are attempting to unregister

Example:

```
zac unr -u administrator -p novell
```

NOTE: Running UNR command might cause high utilization of the database. This might be due to any of the following reasons:

- The UNR command is running on the server.
- The zone contains large number of managed devices.
- The managed devices have a huge history.
- The Patch Management is enabled.

zone-config (zc)

This command displays the Zone Configuration server or lists the current zone configuration.

```
zac zc
```

Inventory Commands

• "inventory (inv) [scannow]" on page 195

inventory (inv) [scannow]

Runs an inventory scan.

An example to run an inventory scan:

zac inv scannow

Inventory-Only Commands

These commands are used only for Inventory-Only (IOA) agents.

zac ioa cfg <server ip>

Configures the MAC IOA device to the mentioned server ip.

An example to register a MAC Inventory-Only device to the server <10.70.13.124>

```
zac ioa cfg 10.70.13.124
```

zac ioa version

Displays the version of the Inventory-Only (IOA) agent.

inventory (inv) [scannow]

Runs an inventory scan.

An example to run an inventory scan:

zac inv scannow

Patch Management Commands

- "patch-scan (ps)" on page 195
- "patch-scan --quick (ps --quick)" on page 196
- ◆ "patch-scan --complete (ps --complete)" on page 196
- "patch-apply-policy (pap)" on page 196
- "patch-quarantine-release (pqr)" on page 196

patch-scan (ps)

Scans the device for patches that are not applied, using the device's current patch signature (DAU) file. The results are then uploaded to the server.

An example to run a patch scan:

```
zac ps
```

```
patch-scan --quick (ps --quick)
```

Uploads the last scan results to the server; it does not run a new detection scan.

An example to run a quick patch scan:

```
zac ps --quick
```

```
patch-scan --complete (ps --complete)
```

Scans the device for patches that are not applied, using an updated patch signature (DAU) file. The results are then uploaded to the server.

An example to run a complete patch scan:

```
zac ps --complete
```

patch-apply-policy (pap)

Updates devices with the latest version of all patch policies.

An example to run a patch apply policy:

```
zac pap
```

patch-quarantine-release (pqr)

Releases any quarantined patches on the device where the command is run from quarantine so that a one-time installation attempt can occur, either from a patch policy schedule or a remediation schedule.

An example to run a patch guarantine release:

```
zac pq
```

Satellite Roles Commands

```
• "satellite-cachecfg (satcfg)" on page 196
```

- "satellite-clearcache (satcc)" on page 196
- "satellite-refreshcfg (satrc)" on page 196
- "satellite-roles (satr)" on page 197

satellite-cachecfg (satcfg)

Reads Satellite roles from cache.

An example to read Satellite roles from cache:

```
zac satcfg
```

satellite-clearcache (satcc)

Clears Satellite configuration information from cache.

An example to clear Satellite configuration information from cache:

```
zac satcc
```

satellite-refreshcfg (satrc)

Refreshes Satellite roles.

An example to refresh Satellite roles:

```
zac satrc
```

satellite-roles (satr)

Reports on current Satellite roles and their state.

An example to report on current Satellite roles and their state:

zac satr

Status Commands

• "zenhttp-status(zhs)" on page 197

zenhttp-status(zhs)

Lists port and tags for registered handlers.

An example to list port and tags for registered handlers:

zac zhs

This command is applicable only if the agent is promoted as a satellite.

System Update Commands

- "zac zeus-refresh / zeus-ref" on page 197
- "zac system-update-report-status / surs" on page 197

zac zeus-refresh / zeus-ref

Retrieves the system update when it is assigned to a device.

```
zac system-update-report-status / surs
```

Enables administrators to resend the system update status to the server immediately.

ZENworks Certificate Commands

```
zac certificate-verify / cv
```

Verifies if the server certificate and key file copied to the remint repository are valid and updates the results to the server.

7 ZENworks Diagnostic Center

ZENworks provides a tool called as ZENworks Diagnostic Center (ZDC) that helps you to verify the health of the Primary Servers and the Management Zone before deploying a system update.

ZENworks Diagnostic Center (ZDC) performs a series of diagnostic tests on Primary Servers, and determines the state of the Primary Servers and the Management zone. ZDC comprises of the following verifiers:

- **ZENworks System Files Verifier:** Verifies the existence and consistency of critical system files that are required by ZENworks.
- **ZENworks Database Schema Verifier:** Validates the correctness of the schema (tables, indexes, database procedures, etc) of the databases used by ZENworks.
- **ZENworks Content Verifier:** Validates the existence and consistency of the contents hosted on the Primary Server that has ZDC installed and running.

To verify the database schema before upgrading to ZENworks 2017, you must use the ZENworks Diagnostic Center tool available in the ZENworks 2017 Installation media. To verify the health of the Primary Servers and the Management Zone after upgrading to ZENworks 2017, download and use the ZENworks Diagnostic Center from ZENworks Control Center. For more information, review the following sections:

- Section 2.1, "Collecting ZDC Baseline," on page 199
- Section 2.2, "Downloading and Extracting ZDC," on page 200
- Section 2.3, "Running ZDC," on page 200

2.1 Collecting ZDC Baseline

When you perform some database maintenance activities, the database objects such as indexes might be missing, as a result, issues such as performance degradation, might be observed. Hence, before performing any database maintenance activities, it is recommended that you to run ZDC and collect a baseline from the database. After completing the maintenance activity, run ZDC again to identify and re-create the missing schema objects. The steps to be performed are as follows:

1. Download the relevant version of ZDC from the Micro Focus Customer Center.

For example, if you are using ZENworks 2017 Update 4, then ensure that you download and use the ZDC for ZENworks 2017 Update 4.

- 2. Run the following commands on a Primary Server to collect the baseline schema:
 - ◆ ZENworks Database: ./zdc collect -v zendatabase -b mybaseline.zdc
 - Audit Database: ./zdc collect -v auditdatabase -b mybaseline.zdc

The baseline file (mybaseline.zdc) is saved in the same location.

3. Perform the required database maintenance activity.

After performing the required maintenance activity, run the following commands to verify the schema of the database:

- ZENworks Database: ./zdc verify -v zendatabase -b mybaseline.zdc
- Audit Database: ./zdc verify -v auditdatabase -b mybaseline.zdc

2.2 Downloading and Extracting ZDC

You need to download and extract ZENworks Diagnostic Center on the Primary Server on which you want to run the tool.

1 Open a Web browser to the following address:

Micro Focus Download site.

2 From the ZCM <version> ZENworks Diagnostic Center - executable and pattern file page, download the ZENworksDiagnosticCenter.zip file to a temporary location and extract the ZIP file contents.

ZENworks system files and the ZENworks database schema require baseline data collected from known good deployments to compare with and assess the health of the current deployment data.

The ZIP file contains the baseline data file, zdc_<version>.zdc, which is available in the data directory. This file contains the baseline data collected from the known good deployments of ZENworks Configuration Management.

ZDC executable and configuration files are required to run ZDC. The directory that contains the ZENworks Diagnostic Center is referred to as \$ZDC_Home.

2.3 Running ZDC

- 1 At Primary Server's console prompt, go to the \$ZDC_Home directory.
- **2** Run the appropriate command.
 - To verify the ZENworks system files, the ZENworks database schema, and the ZENworks content:

```
On Windows: zdc.bat verify -v systemfiles,zendatabase,zencontent -b
<complete_path_of_the_ZDC_baseline_data_file>
```

```
On Linux: ./zdc verify -v systemfiles,zendatabase,zencontent -b
<complete_path_of_the_ZDC_baseline_data_file>
```

To verify only for the ZENworks system files:

```
On Windows: zdc.bat verify -v systemfiles -b
<complete_path_of_the_ZDC_baseline_data_file>
```

```
On Linux: ./zdc verify -v systemfiles -b
<complete_path_of_the_ZDC_baseline_data_file>
```

• To verify only for the ZENworks database schema:

```
On Windows: zdc.bat verify -v zendatabase -b
<complete_path_of_the_ZDC_baseline_data_file>
```

On Linux: ./zdc verify -v zendatabase -b
<complete_path_of_the_ZDC_baseline_data_file>

• To verify only for the ZENworks content:

On Windows: zdc.bat verify -v zencontent

On Linux: ./zdc verify -v zencontent

You can also specify the following command options while running ZDC.

- -s: session name
- -l: complete path of the ZDC log filename
- -r: complete path of the ZDC reports directory

ZDC runs the diagnostic tests and generates the reports in the HTML format. The reports are stored in the \$ZDC_Home\reports\timestamp directory on a Windows Primary Server and in the \$ZDC_Home/reports/timestamp directory on a Linux Primary Server. To view the reports, open index.html that is located in the report directory.

The complete log of the diagnostic tests is stored in $\DC_HOME \log \times timestamp.log$ on a Windows Primary Server and in the $\DC_HOME/\log \times timestamp.log$ on a Linux Primary Server.

IMPORTANT: If the ZENworks database is on the Microsoft SQL server, check for schema differences by running ZDC. If the unique constraint is not created on the serial number column of the zDevice table, duplicate serial numbers might be assigned to the devices that are connected to the Management Zone. For information, see *Troubleshooting the database migration failure*, duplication of serial numbers in the zDevice table.

Verifying Audit Database

To verify the Audit Database schema in ZENworks by using the ZDC tool:

- On Windows: Run the zdc.bat verify -v auditdatabase -b <complete path of the ZDC baseline data file > command.
- On Linux: Run the ./zdc verify -v auditdatabase -b <complete_path_of_the_ZDC_baseline_data_file> command.

Audit and ZENworks databases cannot be verified by running the command in one instance. They need to be verified separately.

The ZDC reports for Audit are present in the reports\timestamp directory. You can view reports from the index.html file.

Troubleshooting ZENworks Command Line Utilities

The following sections provide solutions to the problems you might encounter while working with Micro Focus ZENworks command line utilities:

- "When you run the zman db command, Java heap space error might occur" on page 204
- "zman hangs when the output of a command is redirected to a file by using the command line redirection operators such as > or >>" on page 204
- "An incorrect success message is displayed when the "stage group name" optional argument is not passed to the system-update-staging-group-create command" on page 205
- "The Imaging role added to a Satellite by using the zman ssaimg command is not immediately applied to the server" on page 205
- "The zman commands do not work for non-root users on a ZENworks Linux server" on page 205
- "A non-root user is unable to configure a Satellite role by using the zman ssc command" on page 206
- "The zac cuo command does not upload the agent audit files from the Satellite Server to the Primary Server when the collectionStatsDB database is corrupted." on page 206
- "Some zman commands fail with an OutOfMemoryError" on page 207
- "The zman command ssd that is used for removing a satellite role fails" on page 207
- "zac commands hang on RHEL Satellite Servers when the content replication schedule is configured for a short duration" on page 207
- "When you run the zman db command, Java heap space error might occur" on page 204
- "zman hangs when the output of a command is redirected to a file by using the command line redirection operators such as > or >>" on page 204
- "An incorrect success message is displayed when the "stage group name" optional argument is not passed to the system-update-staging-group-create command" on page 205
- "The Imaging role added to a Satellite by using the zman ssaimg command is not immediately applied to the server" on page 205
- "The zman commands do not work for non-root users on a ZENworks Linux server" on page 205
- "A non-root user is unable to configure a Satellite role by using the zman ssc command" on page 206
- "The zac cuo command does not upload the agent audit files from the Satellite Server to the Primary Server when the collectionStatsDB database is corrupted." on page 206
- "Some zman commands fail with an OutOfMemoryError" on page 207
- "The zman command ssd that is used for removing a satellite role fails" on page 207
- "zac commands hang on RHEL Satellite Servers when the content replication schedule is configured for a short duration" on page 207

When you run the zman db command, Java heap space error might occur

Source: ZENworks 2017 Update 2

Explanation: When you run the zman db command, OutOfMemoryError: Java heap space

error might occur.

Possible Cause: Limited java heap memory configured for the zman process.

Action: Using the new configure action UpdateZManConfigPropertiesConfigureAction

you can configure the heap-size. By default, maximum heap-size is set to 512.

To increase the heap size:

In the command prompt, run the following command:

```
novell-zenworks-configure -c
UpdateZManConfigPropertiesConfigureAction -
Dzman.jvm.max.heapSize=<user-input>
```

Where <user-input> can be between max.heapSize: 512 (default) to 1024 (upper-bound)

Apart from max.heapsize, you can configure other parameters such as min.heapSize, scrollSize and debugLevel.

```
novell-zenworks-configure -c
UpdateZManConfigPropertiesConfigureAction -
Dzman.jvm.max.heapSize=<user-input> -
Dzman.jvm.min.heapSize=<user-input> -
Dzman.renderer.scrollSize=<user-input> -
Dzman.debugLevel=<user-input>
```

Where <user-input> for min.heapSize can be between 64(default) to 512(upper-bound)

scrollSize accepts any integer value (-1 default)

debugLevel accepts 1, 2, 3(default) and 4 values

NOTE: If the zman-config.property file is corrupted or deleted, run the novell-zenworks-configure -c

UpdateZManConfigPropertiesConfigureAction command without parameters to get the default values in the file.

zman hangs when the output of a command is redirected to a file by using the command line redirection operators such as > or >>

Source: ZENworks; zman.

Possible Cause: zman requires the ZENworks administrator username and password for

executing each command. If the credentials are not provided with the command, you are prompted to enter the same. However, if the output of the command is redirected to file, you are not prompted to enter the credentials

because the prompts for username and password are also redirected to the file. Consequently, zman hangs, waiting for the credentials to be entered.

Action: Specify the credentials as part of the command by using $-U \mid --User$ and $-P \mid --User$

Password options.

Action: Store the credentials by using the admin-store-credential command and

then execute the command.

Action: Redirect the output to a file by using the -R|--Redirect option instead of a

redirection operator such as > or >>.

An incorrect success message is displayed when the "stage group name" optional argument is not passed to the system-update-staging-group-create command

Source: ZENworks; zman.

Explanation: zman displays the following incorrect message if the stage group name optional

argument is not passed to the system-update-staging-group-create

command:

Successfully created the object "null"

Action: To view the list of staging groups that would include the newly created staging

group, execute the system-update-staging-group-list (susgl)

command at the console prompt.

The Imaging role added to a Satellite by using the zman ssaimg command is not immediately applied to the server

Source: ZENworks; zman.

Explanation: If you configure the Imaging role by the using the zman ssaimq command, the

role is immediately added to the device. If the role is not immediately added, it

is added only during the next device refresh schedule.

Action: If you want to immediately apply the role to the device, you must manually

refresh the device in one of the following ways:

• At the command prompt, run the zman workstation-refresh | wrf command. If the managed device is a server, run the zman server-

refresh | srf command.

• On the managed device, right-click the ZENworks icon, then click Refresh.

The zman commands do not work for non-root users on a ZENworks Linux server

Source: ZENworks; zman.

Explanation: If a non-root user executes the zman commands on a ZENworks Linux server,

the following error message is displayed:

You do not have sufficient privileges to run zman commands. As a non-root user in Linux, you should be part of the

zmanusers group to run zman commands.

Action: Add the non-root user to the zmanusers group before executing the zman commands.

- 1 Log in to the ZENworks server as root.
- **2** At the server console prompt:
 - If the user already exists on the Linux device, execute the following command:

```
groupmod -A non-rootusername zmanusers
```

 If the user does not exist on the Linux device, execute the following command:

```
useradd -G zmanusers non-rootusername
```

3 Log in to the ZENworks server as a non-root user.

A non-root user is unable to configure a Satellite role by using the zman ssc command

Source: ZENworks; zman.

Explanation: If a non-root user tries to configure a Satellite role by using the zman ssc

command on a Linux Primary Server, the following error message is displayed:

The role you specified (Satellite_role_name) is not a valid satellite server role. Valid roles are:

ZoneConfig.ROLE_COLLECTION ZoneConfig.ROLE_CONTENT

ZoneConfig.ROLE AUTHENTICATION

Action: Do the following:

- 1 Ensure that the non-root has been added to the zmanusers group.
 - **1a** Log in to the ZENworks server as root.
 - **1b** At the server console prompt:
 - If the user already exists on the Linux device, execute the following command:

```
groupmod -A non-rootusername zmanusers
```

 If the user does not exist on the Linux device, execute the following command:

```
useradd -G zmanusers non-rootusername
```

2 Add the non-root user to the ZENworks user group by using the usermod -A non-root_username command. Subsequently, the non-root user can configure Satellite roles.

The zac cuo command does not upload the agent audit files from the Satellite Server to the Primary Server when the collectionStatsDB database is corrupted.

Source: ZENworks; zac.

Explanation: When the agent audit files are uploaded to the Satellite Server, the server

maintains references to the audit files in the collectionStatsDB database. If the database is corrupted, all the references are lost and the files get orphaned. Hence, when you run the zac cuo command to upload the agent audit files to

the Primary Server, you will receive an error.

Action: To upload the agent audit files to the Primary Server, you should perform the following steps on the Satellite Server:

1 Stop the agent service.

- 2 Delete the /var/opt/novell/zenworks/work/collection/ collectionStatsDB folder that has references to the orphaned audit files.
- **3** Start the agent service.
- 4 Execute the zac cuo command.

Some zman commands fail with an OutOfMemoryError

Source: ZENworks; zman.

Explanation: Some zman commands might fail with an OutOfMemoryError.

Action: Increase the max heap size for zman:

Windows: In the %ZENWORKS_HOME%\conf\zman\properties\zman-config.properties file, increase the max heap size value of the JVM STARTUP OPTIONS from 128m to 512m.

Linux: In the /opt/novell/zenworks/bin/zman file, increase the max heap size of MEM OPTS from 256m to 512m.

The zman command ssd that is used for removing a satellite role fails

Source: ZENworks; zman

Explanation: The zman command ssd fails with the following error:

An internal error occurred. Please check the zman log for

more

When you use ssd, the zman command for removing a role from the satellite, this command removes the role but fails to send the refresh satellite quicktask.

Possible Cause: This is because the refresh satellite quicktask is already in process for the

satellite or about to be processed.

Action: None

zac commands hang on RHEL Satellite Servers when the content replication schedule is configured for a short duration

Source: ZENworks; zac

Explanation: When you run zac commands on an RHEL Satellite Server, the process hangs

indefinitely.

Possible Cause: Content replication schedule is configured for a short duration. For example, 5 minutes.

NOTE: It is recommended to configure the content replication schedule for 12 hours.

Action: Log into ZENworks Control Center and add a zone system variable, enable.cdp.cleanup.thread.wait.time, and set the value to True.

4

Guidelines for Working with Zman

Follow these guidelines as you work with the zman command line utility of Micro Focus ZENworks:

- If an XML file that is exported by using the zman commands such as bundle-create or policy-create contains diacritic or extended ASCII characters such as ñ,ë, and Ä, you must open the file in an editor using the UTF-8 encoding. If you make any changes to the file, you must save it the UTF-8 format.
- If you want to redirect the output of a command containing extended ASCII characters to a file
 on Windows, you must not use the command line redirection operator (>), because the code
 page of an MS-DOS prompt is different from the code page used to write to files on most
 locales.

For example, in case of Western European languages like English, French, German, and Spanish, the code page of the DOS prompt is cp437 or cp850, but the rest of the Windows operating system uses cp1252.

To redirect the output to a file and correctly retain the extended ASCII characters, use the $-\mathbb{R}$ | $-\mathbb{R}$ | $-\mathbb{R}$ | edirect global option.

 While connecting to Linux Servers from a Windows machine by using clients like PuTTY, set the character set used for translation to UTF-8. This ensures proper translation of characters other than standard ASCII characters.

To set the character set for translation to UTF-8 in PuTTY:

- 1. Open the PuTTY client.
- 2. In the PuTTY Configuration window, click Windows > Translation.
- 3. In the Received Data Assumed to be in Which Character Set drop-down list, select UTF-8.

NOTE: You do not need to do this if the input to the command or its output contains only the a-z or A-Z characters.

- By default, zman uses the default locale of the server. You can have zman use a specific language:
 - On Windows, specify the appropriate user language and file encoding as a value for the JVM_STARTUP_OPTIONS property in

ZENworks_Installation_directory\Novell\ZENworks\conf\zman \properties\zman-config.properties.

For example, to run zman in English, set the value of JVM_STARTUP_OPTIONS to - Duser.language=en -Dfile.encoding=cp850. After editing the file, change the code page of the command prompt to cp850 by using the chcp 850 command.

On Linux, edit /opt/novell/zenworks/bin/zman to add Duser.language=<language> after /opt/novell/zenworks/lib/java/bin/java.

For example, to run zman in English, change the zman script file as follows:

/opt/novell/zenworks/lib/java/bin/java -Duser.language=en Djava.library.path="\${LD_LIB_PATH}"